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1815-1887.
Chinese researches

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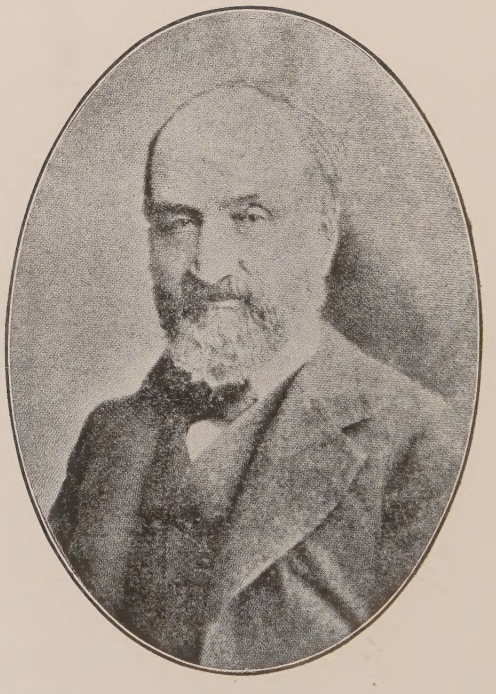

Alexander Wylie.

Chinese Researches

BY

ALEXANDER WYLIE.

Author of Notes on Chinese Literature, &c., &c.

SHANGHAI.
1897.

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PREFACE.

THE publication of this volume has been long delayed. Some years passed after Mr. Wylie's death before it was decided to issue a selection of his essays. As only fragments of time, from a busy life, could be given to the examination of the boxes full of "papers" and "manuscripts" which Mr. Wylie had written, many months passed before this preliminary work was done. When the Essays to be published had been selected, considerable time and labour were absorbed in preparing them for the press. It was then found that the book could not be printed in England, and two efforts to get it published in China failed. But when the Rev. W. Muirhead, D.D., of Shanghai, was in England, he generously took charge of the manuscripts, and undertook to carry the book through the press when he returned to China. It is to his kindness its publication is now due. Only by dividing the manuscripts between two printing establishments could the work of printing be completed in a year. This accounts for the want of continuity in the numbering of the pages.

The Essays chosen for publication have been selected in order to show the great variety and wide scope of the Author's researches and attainments. The number of Essays still in manuscript is sufficiently large to fill two volumes of similar size to this. I intended to publish a fuller biography of the distinguished Author, but special circumstances compelled me to abandon this, and Dr. Muirhead has therefore republished my little sketch of Mr. Wylie's life and Mr. Cordier's paper read at the meeting of the Royal Asiatic Society in London.

JAMES THOMAS.

LONDON,
November, 1897.

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THE VALUE OF MR. WYLIE'S CHINESE RESEARCHES.

As a friend of many years, whom I first knew in 1848, and who during the interval from that year till he died in 1887, proved himself to be one of the most learned of Scotland's sons in the Far East. I have always watched his career with unfailing interest. He told me in 1848 that the winter before he had studied Manchu with Sir Harry Parkes, and soon he and I began to study Mongol and Manchu together. He had a passion for acquiring languages, and a strong power of memory, which was much strengthened by the interest he felt in the history of the Jews and Christian missions in Asia generally, in the remarkable story of Bible versions, and in the history of literature and of mathematics. He went beyond every one else—French, English, Dutch or German—in his knowledge of Chinese mathematical literature. Biot, father and son, were able mathematicians, but their guides the Jesuits in Peking never studied the Sung dynasty mathematics, and in the Ming dynasty this branch of literature had been neglected in Peking by native scholars. Biot, father and son, were therefore at a disadvantage in their researches on Chinese mathematics and astronomy. Wylie studied the Sung dynasty arithmetic with the help of Li Shan-lan, a native mathematical author of high attainments. In 1852, after five years in China, he showed that Horner's method for solving equations of all orders published in 1819, was anticipated by Chinese mathematicians in the 14th century, that is, five hundred years before. The shortness of the time Wylie had spent in the country when he reached this result, shows how his mind moved with freedom among the abstractions of the higher mathematics. This rare faculty fitted him to become the translator of works on the Differential and Integral Calculus

into Chinese. It is also a most valuable proof of the equality of the intellectual gifts of the Chinese with those of European nations. Wylie showed that they possess the necessary power to become senior wranglers in a competition for the highest mathematical prizes with the gifted youth of Europe. In historical research he was greatly aided by his habit of unwearied reading in Chinese history and mediæval literature. He had a passion for buying books, when books at Shanghai were unusually accessible on account of the rebellion. He possessed the bibliographical faculty in a high degree. This is shown in his Notes on Chinese Literature, in his Memorials of the Protestant Missionaries, in his Life of Seu Kwang-ki, and in his Catalogue of the London Mission Library at Shanghai. In historical research he was one among such as Legge, Medhurst, Douglas, Mayers, Palladius, Bretschneider, Parker, D. J. Macgowan, Bushell, S. W. Williams, Schlegel, Von Groot, Hirth, Giles, Eitel, Chalmers, Martin, Faber, Von Mollendorff, Chavannes and others. Among these names Legge has shown the widest knowledge of the classics of the Chinese, and Wylie the most extensive acquaintance with their literature. But Wylie, with all his assiduity and calmness of judgment, was not infallible. For instance the Hien-kiau, of the Tso-chwen and later books, is really the Persian religion and not Judaism, and Yaou-kwan was right in saying in the Se-ke-ts'ung-yü that the Hien-kiau was the Persian religion, because that religion at an early time had human sacrifices. Nor did Wylie remark when writing his article on the Sabbath that the character *mit*, denoting Sunday in the Fukien calendar, is really Mithras, the sun god of the Persians.

Ten years have gone since he passed away, and all those who knew him, and consult his works with advantage, unite in wishing that this selection from the more valuable of his shorter productions should be printed as a monument to an indefatigable student and a good and able man. As a collection of researches it will serve many an important purpose. Wylie had an ineradicable conviction that in the depths of Chinese history a mass of important facts are hidden. He was no doubt right. His example of successful investigation, continued through a long period of years will, it is hoped, stimulate men of the new generation to follow him eagerly in the path of useful inquiry traced in this volume.

Wylie was most helpful to Sir Emerson Tennent in writing his History of Ceylon, to Sir Henry Yule in his edition of Marco Polo, to Mr. Henri Cordier in Bibliography, and to Sir Henry Howorth in his History of the Mongols. He gave disinterested aid of the most valuable kind to all who appealed to him for assistance on subjects needing research in Chinese literature.

His Notes on the Syrian Inscription, his List of Names of Fixed Stars, his List of Eclipses observed by the Chinese and his Discussion of the Origin of Manchu Writing, are the fullest we have on these subjects.

J. EDKINS.

June 6, 1897.

BIOGRAPHICAL SKETCH OF ALEXANDER WYLIE.

By The Rev. James Thomas.

ALEXANDER WYLIE was born in London, on April 6, 1815. His father came from Scotland to London about the year 1791, and carried on the business of an oil and colour merchant in Drury Lane. Alexander was the fourth child and youngest son. Being of a delicate constitution, he was sent to Scotland when a year old, and placed under the care of a relative who lived on the Grampians. His education was begun in the grammar school at Drumlithie, and after his return to London it was continued in Chelsea. On leaving school he was apprenticed to a cabinet-maker, and while in this business he spent some months at Hatfield, restoring Hatfield House after a fire.

Little is known of the beginning of his religious life, but he was a member of the National Church of Scotland, Crown Court, Covent Garden.

From an early period he seems to have cherished the hope of going to China, and, unaided by any tutor, he commenced the study of the Chinese language. Having bought a copy of Premare's *Notitia Linguae Sinicae*, he learnt Latin in order to read it. Then, procuring from the British and Foreign Bible Society a copy of the New Testament, he began the study of Chinese in earnest, making his own dictionary as he proceeded. His method is interesting. Taking the Gospel according to St. John, he knew that in the first verse of the first chapter the word for "God" occurred twice, and the term for "Word" three times, he was able at once to begin his vocabulary with these words. In a similar manner he added other words until he made quite a useful dictionary.

When Dr. Legge returned to England in 1846, he was anxious to find a suitable man to take charge of the London Missionary Society's printing establishment at Shanghai, the British

and Foreign Bible Society having offered to defray the cost of the printing of the Delegates' Version (which had just been commenced), and also to provide a printer, if all his time were devoted to this work. Dr. Morrison of Brompton sent Mr. Wylie to Dr. Legge as just the man he wanted; and, to Dr. Legge s great surprise, he found that with only Premare's volume and the New Testament, he had so far mastered Chinese as to be able to read the Gospels with tolerable accuracy. The London Missionary Society engaged him, and sent him to the office of Mr. (afterwards Sir) Charles Reed, to study printing for six months, during which time Dr. Legge aided him in learning Chinese. The following year, 1847, he sailed for Shanghai, where he arrived on August 26, and took charge of the Mission Press. In the Bible Society's Report for that year, it is recorded that a grant of £1000 was made to the London Missionary Society, "to enable them to forward to Shanghai a cylinder printing-press, and an additional quantity of Chinese type, and also to defray the expense connected with sending assistance from this country for printing the Chinese Scriptures." It is added, "the printer and the press have recently left England. May God speed their voyage and crown the undertaking with His largest blessing!" From the first, therefore, Mr. Wylie was practically the *employé* of the Bible Society, his salary being paid from the Society's funds.

In 1848 Mr. Wylie married, in Shanghai, Miss Mary Hanson, who had been for seven years a Missionary among the Hottentots, and whom he met on her return to England from Kaffirland because of the war. Mrs. Wylie died the following year, leaving an infant daughter, and for the remainder of his life Mr. Wylie was a widower.

Devoting himself to his work, he became a master of the art of printing. Some of the editions of the Scriptures which he issued are beautiful specimens of typography, and excited the admiration of the Chinese as well as that of Europeans. His evenings and early mornings were devoted to study; and during the years in which he was in charge of the Press, he learned the French, German, Russ, Manchu, and Mongol languages, as well as a good deal of Greek, Uigúr, and Sanskrit. He was deeply read in the history, geography, religion, philosophy, arts and sciences of Eastern Asia. Probably no man had a wider acquaintance than he with Chinese literature. And he wrote some important works, both in Chinese and English. Of these the most valuable are the following:—

In Chinese.

A Compendim of Arithmetic. 2 vols. 1853.

Supplementary Elements of Geometry. Being Books 7-15 of Euclid, in continuation of Ricci's translation of the first six Books. 1857.

This was republished with the first six Books by Tsêng-Kwo-fan, Viceroy. 1865.

Popular Treatise on Mechanics. 1858.

Elements of Analytical Geometry and of the Differential and Integral Calculus. In eighteen books. 1859.

Outlines of Astronomy. Herschel's work. Illustrated by the original engravings. 1859.

Chinese Grammar of the Manchu Tartar Language. With Introductory Notes on Manchu Literature.

Main and Brown on the Marine Steam-Engine. 4 vols. 1871.

The Gospels of St. Mathew and St. Mark. Manchu and Chinese.

In English.

The Shanghai Serial. Articles on Chinese Religion, Literature, and Science. Memorials of Protestant Missionaries to the Chinese 1867.

Notes on Chinese Literature. A most valuable contribution to Chinese Bibliography, over two thousand treatises being reviewed in it.

Translations from the Tseen Han-Shu; or, the Ethnography of the Han.

He wrote the valuable articles on "China and Chinese Literature" in the *American Encyclopedia*. He also contributed many papers to the Journal of the North-Chinese Branch of the Royal Asiatic Society, of which he was one of the founders. He wrote many articles for the *Chinese Recorder* and other magazines; and edited the best book on Chinese Buddhism. He was a member of most of the learned Societies which are occupied which Oriental research, and he was deputed to attend the Congress of Orientalists in Italy.

While in charge of the Press in Shanghai, he took the deepest interest in the evangelisation of the Chinese, often accompanying his fellow missionaries into the regions beyond. On one of these journeys, disguised as a Chinaman in native dress and spectacles, in the city of Soochow, he was discovered to be a foreigner, and was roughly treated. Happily his pigtail came off in the hands of his captor, and saved him from much inconvenience at the time.

After a prolonged examination by the authorities, he and his fellow traveller were set free, but charged never to appear in that city again.

Nor was this the only narrow escape which he had. When the city of Shanghai was held by the rebels, in company with Dr. Lockhart, he passed through the French lines and entered the city in the middle of the night, to try to induce the commander to surrender, in order to save the city and lives of the people. During the rebellion he was always, ready to undertake any duty, even at the risk of his life. One day, just after he had risen from a seat in his own house, a stray bullet from the rebel soldiers pierced the chair he had quitted.

The concurrence of events at the time of his going out was remarkable. The Delegates had just assembled in Shanghai to begin the revision of the New Testament in Chinese. Mr. Wylie's knowledge of Chinese was sufficient to lead him to take a deep and intelligent interest in the version, although he was not a member of the Revising Committee. The Bible Society's Jubilee, coinciding with the rising of the Taipings, who appeared to be so favourable to the spread of Scriptures, became the occasion for creating a fund to provide a million Testaments for China. But the great civil war soon hindered Christian work. Stocks of Scriptures began to accumulate. The Shanghai Committee urged the suspension of printing operations; and that instead of such work, Mr. Wylie should be engaged as an Agent of the Bible Society and this was agreed to for a year as an experiment. Mr Wylie accompanied Lord Elgin on his great expedition up the Yang-tsze, and proved himself to be the very man to represent the Society in China.

In November, 1860, he left Shanghai to return to England for a time. He went back to China in 1863, as the Agent of the Society, travelling by way of St. Petersburg and Siberia to Peking. He continued in charge of the Agency until 1877. During this time, he made extensive journeys throughout China, and also visited seven out of the eighteen provinces of China, making journeys of great extent, and often at the greatest peril. On one occasion he escaped being shot by pirates, only by having removed from his seat in the boat a moment or two before a bullet struck it. Thus, it will be noticed, his life was twice saved in a remarkable and almost identical manner. In his zeal he traversed extensive areas of country, visiting in all fourteen of the eighteen provinces, not only in order to organize a wise system of colportage, but also to do all that he could in personally distributing

God's Word. In 1868 he went, accompanied by the Rev. Griffith John, on a great journey up the Yang-tsze to the capital of Sz-chuan, thence across country to the source of the River Han, and then to Hankow and Shanghai,—a tour occupying more than five months, extending over 2500 miles, and involving great hardship and peril. He was often the first foreigner to enter great Chinese cities, being glad of the honour of thus preparing the way of the Lord.

He was the first to see the importance and value of employing foreigners as superintending Colporteurs, and he placed his men so that every village and town and city in certain provinces were visited, and the Scriptures offered to the people.

Preferring the system of sale, as a rule, to that of gratuitous distribution, he led all the Missionaries to see the wisdom of it, so that the Report for 1877 records the unanimity with which this method had been adopted. In ten years he was instrumental in getting over a million copies dispersed among the people, and before he left China he had the joy of seeing more than a million New Testaments put into circulation, besides a great many Portions. He organized a Bible-text Conserving Committee, and had stereotype plates made for the Delegates' Version, so that for that version his successor should not have the exhausting and blinding task of reading and correcting proofs.

During his stay in Shanghai the making of founts of moveable metallic type was brought to the present point of perfection, and in this invaluable work he had a share.

In 1877, on account of the failure of his eyesight, which had been brought on by incessantly reading the proofs of the Chinese Scriptures, he returned to England, and retired from active labour. He took up his abode at Hampstead, and resided there until his death. He was taken ill on February 6, 1883, became totally blind, and gradually grew very feeble For the last two years of his life he was entirely confined to his bedroom ; yet he was always cheerful. At length softening of the brain showed itself, and his mind lost its clearness and power. The end came, as it seemed to those who were nursing him, rather suddenly. He was taken away very quietly on Sunday evening, February 6, 1887, and his remains were interred in his father s tomb, Highgate Cemetery, on the 10th, several of his oldest China friends, as well as others, sorrowing over the grave.

Alexander Wylie was a man of great natural gifts, having particularly a strong brain and remarkable memory. Possessing vigorous health, he employed both his gifts and his time most

diligently, seldom allowing himself more than six hours for sleep. No man ever troubled others, or himself, with fewer self-regarding thoughts. The idea of personal aggrandizement never entered his mind. All his books were published for the good of others and without any pecuniary benefit to himself. He estimated labour according to its usefulness, and not as a source of monetary gain. He was most modest and retiring, never intruding himself or his opinions, uninvited. To those, therefore, who did not know him well, he seemed to be a very commonplace man, and not the genius that he was. Strong Protestant as he was, his character nevertheless attracted to him many of the Roman Catholic priests of both the Jesuit and Dominican Orders. The Archimandrite of the Greek Church in China was also his personal friend. He was so true a representative of the Bible Society, that Protestant Christians of all names, and several nationalities, felt that he was the model man for the post. He was also held in the highest respect by all the representatives of Western Powers at the Court of Peking. Sir Thomas Wade writes of him, "A better man, I think, I never knew, whether in what he laid down as to be done, or what he did. In his own province of Sinology, which was rather bibliography and archæology, he was greatly valued, and I have heard scholars of note admit their obligations to him. I wish to express my sympathy with those who survive him, and my respect and regard for the man himself." Mr. Wylie had a rich fund of humour, which made him a charming companion. Little children especially were attached to him ; his tender gentle nature at once went forth to them. Withal he was a man of deep yet simple piety, a man of prayer, and a constant student of the Bible which he was living to print and circulate. In peril, in suffering, and in toil he laboured conscientiously and devoutly, as one who worked for the Saviour of the world. His was a good course, and well and nobly finished. His literary work will remain as evidence of his genius, but his truest memorial will be in the hearts of multitudes of the Chinese, to whom he gave the revelation of God which is contained in the Holy Scriptures.

"To live in hearts we leave behind
Is not to die."

THE

LIFE AND LABOURS OF ALEXANDER WYLIE,

By M. H. HENRI CORDIER,

Professor at the Ecole des Langues Orientales Vivantes and Ecole des Sciences Politiques, Paris.

It may be at first a matter of surprise to many that an alien by nationality and religion, a Roman Catholic Frenchman, should come before this learned Society to discourse on the life and labours of a British Protestant Missionary. A few words, however, will show that there are strong reasons for my taking up some of your valuable time with an account of the good work done by our late friend.

Indeed, Wylie's library was the very foundation of my *Bibliotheca Sinica*. In 1869 I was engaged as Honorary Librarian to compile the Catalogue of the Library of the North China Branch of the Royal Asiatic Society at Shanghai, the bulk of which came from Mr. Wylie, when an idea of compiling a list of all the books relating to the Middle Kingdom occurred to me. Having published the catalogue of the Asiatic Society, I have devoted the last eighteen years to this task. I drew much of the necessary materials from the N.C.B.R. Asiatic Society's Library, a great deal more from the new collection made by Wylie during his visit to Europe in 1860. His library was situated on the ground floor at the farthest end of the premises belonging to the London Missionary Society in the Shantung Road, at Shanghai. Four or five large book-cases contained the works comprising his new library. The Chinese books were at the back in a sort of passage. Wylie was exceedingly proud of his Chinese library, rivalled or surpassed in China only by the collection of that very learned sinologist and distinguished diplomatic agent, Sir Thomas Wade, Her Majesty's Minister at Peking. Many an afternoon, winter and summer, did

I sit with Wylie at his small round writing table, he doing some useful work for some one who might never of thanking him for it, I copying titles in view of my *Bibliotheca Sinica*. Wylie was not one of those savants with a solemn appearance who fill with awe and reverence the poor mortals who are allowed to approach them: he had a kindly appearance, a pleasant smile on his face, a modest countenance, and oftentimes, when engaged in conversation he would make you believe that he was highly interested in and derived much knowledge from what you told him. Though extremely pious, he did not think that religion should make one gloomy, and he was at that time of a very genial and humorous turn of mind.

When the *Bibliotheca Sinica* was published in parts, it was to Wylie that I owed the first public recognition of my labours in the *Chinese Recorder*, the *China Review*, *Trübner's Record* and the *London and China Express*. Our friendly relations continued to the end. In fact, I published in my own *Revue de l'Extrême-Orient* what I believe to be the last paper written by him, *The Ethnography of the After Han Dynasty*. I think that under these circumstances, I may feel quite justified in bringing here my grateful tribute to the memory of a friend whose science I admire, whose character and life I hold in high esteem.

Some years ago, as I intended giving some notices about celebrated Sinologists, Wylie, to whom I applied for particulars of his life, sent me his photograph, adding with characteristic modesty, "Your notices of Sinologues will be interesting, but it will be a long time ere it comes to my turn. I really do not know what notes I could give you about myself that would be of any interest to the public. I am essentially one of *hoi polloi*. My birthday was April 6th, 1815, in London, and I reached China August 26th 1847. The rest I think you know tolerably well."

Of the early life of Alexander Wylie I know but few particulars. Dr. James Legge related in *Trübner's Record* (No. 231, vol. viii. No. 1) lately, how he made the acquaintance of Wylie, and under what circumstances the latter proceeded to China: "Having returned from Hongkong to England for a time in consequence of illness, I was living in London in 1846. It was there that I first saw Mr. Wylie. He called on me with a letter from a friend, which told me that my visitor was a cabinet-maker, whom he knew well, of great intelligence and other high qualities, who had been occupying himself lately with the study of Chinese.

I asked the stranger what had made him take up that language, when he said that having picked up, the winter before, at an old-book stall, a copy of Prémare's *Notitia Linguae Sinicae*, he had learned Latin sufficiently to be able to read it, was much interested with it, and wished to obtain some guidance in prosecuting the study of Chinese. There was a New Testament in Chinese on the table. I opened it, and he read with tolerable accuracy a column or two, and translated them with an approximation to correctness. His pronunciation was not exact, but he had got hold of the principle of relative position by which the meaning of the symbolic characters in their combination is determined. I asked him where he had got a dictionary, and he said he had not got one. "How, then, did you learn the names and meanings of those characters?" "Partly," he said, "from Prémare, and I have tried to make a list of characters and their signification for myself. I got a New Testament from the Bible Society. Turning to the fourth Gospel, I knew that the first verse must contain the name for 'God' twice, and the character for 'Word' three times. I put these down, and went on to determine others in the same way." He had brought with him some tracts which he had got from the Religious Tract Society; trying him with one of these, he was not so successful as with the New Testament, but still did wonderfully. I arranged for him to come to me, and get a lesson occasonally. When he left me, I felt sure that if the way could be opened for him to pursue the study under favourable conditions, he was a man who would greatly distinguish himself in the field of Chinese scholarship. The result of that interview was, that soon afterwards he was studying the work and management of a printing office under the auspices of the late Sir Charles Reed, and in 1847 he proceeded to China to take the superintendence of the printing office of the London Missionary Society at Shanghai, which he conducted efficently till 1860."

As soon as Wylie arrived in China, he set at work to master the Chinese language. Knowing well the enormous influence the Classics have on the mind of the natives, and how necessary it is for the missionary to penetrate into the inner thought of the individual, he undertook to translate for himself the whole of the *King*. This wonderful labour he successfully accomplished, and I well remember the six or seven half-bound volumes containing his manuscript on the topshelf of one of his book-cases. However, Wylie considered these translations too imperfect to be printed, so they have remained unpublished; they have fallen into good hands, those of his daughter, with the exception of one in care of Dr. James Legge, who speaks in the following terms

of the version of the *Le ki*: "The present translation [Dr. Legge's] is, as I said above, the first published in any European language of the whole of the *Lî Ki*; but another had existed in manuscript for several years,—the work of Mr. Alexander Wylie. now unhappily, by loss of eyesight and otherwise failing health, laid aside from his important Chinese labours. I was fortunate enough to obtain possessson of this when I had got to the 35th Book in my own version, and, in carrying the sheets through the press, I have constantly made reference to it. It was written at an early period of Mr. Wylie's Chinese studies, and is not such as a Sinologist of his attainments and research would have produced later on. Still, I have been glad to have it by me, though I may venture to say that, in construing the paragraphs and translating the characters, I have not been indebted in a single instance to him or P. Callery."

After trying his hand in this severe task, Wylie was ready to give to the public some works bearing his name. Many opportunities were soon offered to him.

Wylie was one of the foremost contributors to the *North-China Herald* in the early days of that paper. The *Chinese Repository* had ceased to exist in December, 1851, after the completion of its twentieth volume. During the last seven years of its existence, this celebrated magazine had lost from 300 to 400 dollars annually, and its last editor, Dr. S. Wells Wiliams, had discontinued its publication, thinking—and in this he was wrong—that the appearance of numerous newspapers rendered useless a periodical of the nature of the *Repository*. The *North-China Herald* had been started in 1850 at Shanghai, by Henry Shearman, who continued to edit it to his death in 1856. News was then scarce, one monthly line of steamers brought letters and papers from home, and China was not yet connected with Europe by a telegraphic wire, so Henry Shearman gave much place in his gazette to scientific papers. Wylie was one of those who took advantage of the new periodical to publish articles which—owing to their lasting value and to their length—would no doubt have suited the defunct *Repository* better than a weekly chronicle. However, at the end of the year, Shearman used to reprint as an appendix to his Almanac a number of the special articles which had appeared in the *Herald*, making out of valuable materials lost in the files of the newspaper an interesting *Miscellany*—now very rare—which lived until 1858. Charles Spencer Compton, who took Shearman's place, thought it too much trouble to continue

a serial which reflected great credit on its editor, but did not bring him £ s. d.

Two of Wylie's papers in the *North-China Herald* at that time call for some special notice: one is on the celebrated Nestorian stone found in 1625 at Si-ngan fou in the Shensi province, which shows, as everybody knows, that the Christian religion existed in the Chinese Empire as far back as the eighth century, under the rule of the Tang Dynasty. One would have thought that all discussions were at an end after the notes, articles, or books from Fathers Terenz, Trigault, Martini, Senedo, Kircher and Visdelou, from Andreas Müller, Abel Rémusat, Neumann, Leontiev, E. C. Bridgman. Wylie made the subject quite new, and, in spite of more recent researches made by G. Pauthier, Dabry de Thiersant, and others, his series of papers on the Si-ngan fou tablet cannot be overlooked by all who study the progress of Nestorianism through Asia. As late as the 10th of December, 1879, did Wylie busy himself with this favourite subject of his in a short reply to an article of Mr. George Phillips in the *China Review*.

The second of these articles is on the science of the Chinese, particularly on Arithmetic. It was deemed of sufficient importance to be translated into German, and the learned Secrétaire perpétuel of the Academy of Sciences in Paris, Joseph Bertrand, did not think that two lengthy articles in the *Journal des Savans* were unnecessary to bring Wylie's researches before Western mathematicians. This article seems to have been the starting-point of those mathematical and astronomical studies, which though little known in Europe, are perhaps the most important of the scientific baggage of Wylie. In 1753 he gave a compendium of Arithmetic in Chinese, *Soo hëŭ k'é mung*, with a table of logarithms as an appendix. Four years later he gave one more paper on the bibliography of mathematical books, and he then boldly undertook to translate some European scientific books into Chinese. At the beginning of the seventeenth century the celebrated Matteo Ricci, founder of the Jesuits' Mission at Peking, owed as much of his success to his scientific books as to his religious works, one of which remains famous to this day in China: The True Doctrine of God, *Tïen choo she e*, while others like the treatise on Friendship, *Kiao yow-luen*, are not yet forgotten. Ricci had given a general Treatise on Arithmetic, *Tŏng wen swan che shong pien*, a work on Geometry, *Hwan yong kiao e*, etc., and he had translated the first six books of Euclid's *Elements*, *Ke ho yuên pĭn*, in 1608, with the assistance of his noble convert, Seu Kwang ke, whose

life he wrote, *Seu Kwang ke hing lio*. Wylie, following in the wake of Ricci, completed his work by rendering into Chinese book vii to book xv. of the *Elements*, published in 1857 at Sung keang, under the title of *Sŭh ke ho yuên pun*, Supplementary Elements of Geometry. At the end of the short English preface Wylie remarks: "To accompany this issue with an apology would almost seem out of place. Truth is one, and while we seek to promote its advancement in science, we are but preparing the way for its development in that loftier knowledge, which as Christian men and missionaries, it is our chief desire to see consummated." Henceforth *Li Ma-tow* (Ricci, Matteo) and *Wei lĕĕ Yâ-lih* (Wylie) were inseparable, and in 1865 Viceroy Tseng Kwo-fan had both of these works reprinted together at Nanking.

Next follow (Shanghaï, 1858) a Popular Treatise on Mechanics, *Chung hĕŭ ts'ĕen shwo*, from the English, and De Morgan's Treatise on Algebra, *Tsaè soŏ hĕô* (Shanghaï, 1859). Always indefatigable, at the same place and in the same year (Shanghaï, 1859), he produced translations of Loomis' Elements of Analytical Geometry and of the Differential and Integral Calculus, *Taé wé tseih shi keih* and Herschell's *Outlines of Astronomy*, *Tan Teĕn*. This last work is illustrated by the original steel engravings used at home. The astronomical phenomena "cannot fail," Wylie observes at the end of the Preface of Herschell's *Outlines*, "to awaken in inquisitive minds of a certain order, a desire to become better acquainted with those and kindred facts in nature, which is calculated to exercise a healthful influence on the intellectual character. That such facts may lead to juster and more exalted conceptions of 'Him who hath created these orbs,—who bringeth forth their host by number and calleth them all by their names;—who hath made the earth by His power, established the world by His wisdom, and stretched out the heavens by His understanding,' is the sincere desire of the translator."

He occupied himself with these studies late in life, as he devoted a lengthy and most remarkable article to the *Uranographie Chinoise* by Dr. Schlegel, of Leyden, in the *Chinese Recorder*. The work of Schelgel had been very severely criticized, to my mind unjustly, by M. Joseph Bertrand, and Wylie's high encomium was exceedingly gratifying to the learned Dutch professor. Wylie gave to the Fifth International Congress held at Berlin a paper on the Mongol Astronomical instruments kept at the Observatory at Peking. All visitors to the Capital of the Middle Kingdom have admired on the wall of the city or in the garden below the magnificent bronze castings which are generally

ascribed to the Jesuit missionaries of the eighteenth century, especially to Ferdinand Verbiest, though some of them date as far back as the Yuen dynasty. These Mongol instruments are fully described in the memoir presented to the Berlin Congress (1881).

While prosecuting these scientific works, Wylie was studying the Tartar languages, Manchu being especially useful. It is a language more easily acquired than Chinese, and as most Chinese books of importance have been translated into Manchu, a great saving of time may be effected by using the Manchu, instead of the Chinese texts. This was done to a great extent by the missionaries at Peking, and by Leontiev during the Këen-lung period, as well as by Klaproth at the beginning of this century. Wylie was soon able to give articles on some interesting Mongol and Neuchih inscriptions. To facilitate the study of Manchu, he translated in 1855 a Chinese grammar of his language known as the *Ts'ing wán k'e mung*. This work had been already put into Russian by Valdykine in 1804; but Russian being almost as inaccessible as Chinese to most readers, this version remained in manuscript, and I do not think that Wylie even suspected its existence in the catalogue of Klaproth's scattered library. Wylie intended giving a *Manchu Chrestomathy*, but he did not carry out his idea. This Chrestomathy was to include an English translation by Wylie of the so-called Amiot's *Grammaire Tartare-Mantchou*, which was really written in Latin by Gerbillon. The English version was printed, I have seen it, and comprised 30 pages 8vo., but was not published. Four years later (1895), Wylie edited at Shanghai the Gospels of Matthew and Mark from the Manchu translation by Lipovzov and the Delegates' version in Chinese with the titles *Woô choò yây soo ke tŭh sin e chaóu shoo* and *Museı echen isusgheristos i tutapuha itche ghese*. New Testament in Manchu and Chinese.

Amid these multifarious labours Wylie found time enough to edit a new periodical, *Lŭh hô ts'ung tan*, which lasted from January, 1857 to 1858. It includes articles somewhat after the style of magazines, and in it appeared the *Popular Treatise of Mechanics* alluded to already. This serial was, with the exception of the articles on religion, reprinted by the Japanese during the following year.

About this time some spirited gentlemen thinking that tea, silk, and Manchester goods, however important they were from a mercantile point of view, were not sufficient food for the mind, created a literary and scientific association, which soon after

became affiliated to this Society under the name of the North-China Branch of the Royal Asiatic Society. The inaugural address was delivered on the 16th of October, 1857, by the Rev. Dr. E. C. Bridgman, of the American Board of Commissioners for Foreign Missions, the first editor of the *Chinese Repository*, President of the Society. Naturally, Wylie was one of the first contributors, and he gave in the Journal of the Society, almost at the outset, a long notice of the coins of the present dynasty, illustrated with 232 cuts. This catalogue of coins has been completed in 1878 by Mr. James Kirkwood in the *China Review*.

Every one knows of the scion of the Jewish family which emigrated under the Han dynasty, and finally settled at Kaï Fung foo, in the Honan province, where its representatives were discovered by the Jesuits at the beginning of the seventeenth century. Indeed, this group of Israelites do not exist any longer: the Tai-ping rebellion has scattered its few remaining members all over China; in fact, I knew one of the last Jews, who was my tailor at Shanghai twelve years ago. But great interest was taken in them formerly in 1850, the Right Rev. George Smith, then Lord Bishop of Victoria, Hongkong, had sent to them two native Christians on a mission of inquiry; these envoys brought back some manuscripts, facsimiles of which were printed at Shanghai. An agent to the London Missionary Society could not overlook such an interesting question, and Wylie published a valuable article on the Jews in China in 1863 in the *Chinese and Japanese Repository*.

But time had come for Wylie to take a little rest, and he returned home in 1860. He had previously ceded his valuable library, which was to be replaced later on by a still more valuable collection of books, to the North China Branch of the Royal Asiatic Society. A preliminary list was prepared, and I published some years later a full catalogue with notes. A change occurred at this time in Wylie's life. While in London he transferred his connection from the London Missionary Society to the British and Foreign Bible Society, as whose agent he went back to China in 1863. The return journey to China was overland from St. Petersburg to Peking, and Wylie has related it in a too impersonal manner in the *Journal of the N.C.B.R. Asiatic Society*.

Bibliographical labours are those by which Wylie is best known in Europe: indeed his *Notes on Chinese Literature* is actually the only guide to the general literature of China. His debut in this field of learning was the now very rare Catalogue of the

London Mission Library at Shanghai. It is not a meagre list of Chinese titles arranged in alphabetical order, but a catalogue raisonné, with most interesting notices on the works and the authors. It is really a very brilliant prelude (1857) to his greater undertaking. He had given a bibliographical list of works printed in Manchu, in the preface to his translation of the *Ts'ing wān ke' mung* (pp. xlix et seq.), and a descriptive catalogue of the languages into which the Bible has been translated in his *Chinese Western Almanac* for 1860. Wylie always refused to recognize as his own the very useful bio-bibliographical book entitled *Memorials of Protestant Missionaries* (1867). He wrote to me once (28th January, 1872): "I was instrumental in furnishing Gamble with nearly all the information in the 'Memorials of Protestant Missionaries,' but never authorized him to put my name to it. I protested against it at the time he issued it, but have repudiated it so often that I now let the thing take its course." The work, nevertheless, bears fully his mark; it contains the surname and Christian names of every missionary, his native name, and a full list of his publications, whether in Chinese, Malay, or in any other language.

In 1867 the *Notes on Chinese Literature* appeared. Bibliography is not merely a list of works strung together in alphabetical or systematical order. To be a good bibliographer, some general and technical knwledge to classify books, tact to make a discriminate selection of works, exactitude to describe volumes accurately, are required. These qualities are possessed in a high degree by the Chinese, who are first-class bibliographers. Wylie's book is based mainly on the spendid catalogue of the Imperial Library at Peking, compiled during the period Këen-lung from 1772 to 1790, *Kin ting szé k'oo' tseûen shoo tùng mŭh*, an abridgment of which, containing less than a tenth of the original matter, was published under the title of *Kin ting sze k'oo' tseûen shoo kĕèn ming mŭh lŭh*. Wylie followed the Chinese system of classification under four headings, *szé koo*. I. Classics (*Yih-king*, *Shoo-king*, etc.). II. History, *Shé* (History, Geography, etc.:. III. Philosophy, *Tsze* (including Religion, Arts and Sciences). IV. Belles-letters, *Tseih*, the largest of the four divisions, including the various classes of polite literature, poetry, and analytical works. Over 2000 works are described with notes by Wylie, and the whole is headed by a preface and introduction, including a list of the translations of Chinese works into European languages. At the end are to be found an appendix, containing a list of general collections of works,

Tsung shoo, than an index of the titles of books, and an index of the names to terminate the volume.

The work carried on by an agent of a Bible Society partakes somewhat of the labour performed by a pedlar: the chief quality of an agent is activity characterised by itinerancy. Wylie never failed to do his duty, and he travelled extensively throughout the Celestial Empire; he has kept the record of one of his longest journeys in the central provinces in the Journal of the N.C.B.R. Asiatic Society.

About this time Wylie, who was one of the Vice-Presidents of that Society, the late Egyptologist, C. W. Goodwin, being the the President, had the greatest share in editing the Journal. It was during this brilliant period that the Society built rooms for itself, that the library was removed and catalogued, that a museum of natural history was created, and that in the journal were published the remarkable articles of W. F. Mayers, on the introduction and use of gunpowder among the Chinese, of the Abbé Armand David on the Natural History of China, of the Archimandrite Palladius on Marco Polo, of Dr. Emil Bretschneider on the Mediæval Geography of Central and Western Asia.

Wylie himself gave little to the Journal, being fully occupied elsewhere, and he returned to his old studies with two papers on the eclipses recorded by the Chinese, and the opinions of the Celestials regarding these Phenomena. He soon took the editorship of the *Chinese Recorder*. A periodical devoted to missions had been started in January, 1867, at Foochow, under the name of the *Missionary Recorder*; it soon was changed into the *Chinese Recorder and Missionary Journal*, with the Rev. S. L. Baldwin and Justus Doolittle as successive editors; but it was short-lived owing to its almost exclusive tendency; two years later (1874) Wylie took it up. He had much of the spirit which guided the Jesuits at Peking during the last century; he was too liberal minded to separate science from religion; both could march together to their mutual benefit. At once the *Recorder*, transferred to Shanghaï, published papers of the highest order due to Archimandrite Palladius and to Dr. Bretschneider; room was largely given to history and geography, while the *Term* question was renovated with new vigour. But it was Wylie's last great effort. Age, fatigue, and more than age or fatigue—his failing eyesight—compelled him to return to Europe in 1877.

With Palladius' death at Marseilles, just landing from the mail steamer, Brestchneider's return to St. Petersburg, Wylie's demise, historical and geographical studies have suffered irrepar-

ble losses in China; in Europe the innumerable correspondents of these scholars knew well their worth. I may be allowed to quote the following lines: "Not a few of the kind friends and correspondents who lent their aid before have continued it to the present revision. The contributions of Mr. A. Wylie, of Shanghai, whether as regards the amount of labour which they must have cost him, or the value of the result, demand above all others a grateful record here."

These words, written by your illustrious President at the beginning of the *Book of Ser Marco Polo*, the greatest monument ever raised to mediæval geography, could not be passed over in silence.

And what shall I say of the host of newspapers, reviews, magazines, periodicals of all kinds, serials of all size suddenly deprived of one of their most valuable contributors? *North China Herald*, *North China Daily News*, *Shanghae Evening Courier*, *Shanghae Budget*, *China Review*, *Notes and Queries on China and Japan*, may be mentioned as the most important, and it would take two or three pages to index Wylie's articles in these and other papers.

Wylie crossed the Channel in 1878, and was present at the fourth Congress of Orientalists held at Florence, where he read a paper on Corea. On his way back to England he stayed a few days in Paris. The latter days of his laborious life were spent at 18, Christchurch Road, Hampstead, where he could enjoy pure air and the splendid view of the heath. His last work was the translation of the Ethnological part of the history of Han, but he would make himself useful to others, and he revised, among other things, the proof-sheets of the book on *Chinese Buddhism* by his old friend, Dr. Edkins.

But his eyesight was rapidly failing him. The last autograph letter I received from Wylie in March, 1881, is written by a hand which was no more guided by the eyes; later on, his devoted daughter acted as his secretary, and he only signed his name to the letters; towards the end the mind had not survived the eyes, and Wylie had forgotten the world, whilst the world was still expecting some new work from the veteran Sinologist. When this man of good works and deeds breathed his last on the 6th of February, his valiant spirit had long since abandoned his enfeebled body.

Like S. Wells Williams, like many other Sinologists whose primary object in life was the propagation of the Gospel in the Celestial Empire, Wylie was a self-made man, and proud he might be of it, that self-made man, seeing that he could write his own language in such a simple and cheerful manner,

could understand and speak French and German, read Latin and had a knowledge of Russian. He had studied successfully mathematics and astronomy, and mastered so thoroughly the Manchu and Chinese languages, that he leaves translations of Euclid and Herschell and his *Notes on Chinese Literature* as everlasting monuments of his learning and industry. If I add that Wylie never neglected his duties as a missionary, I think I shall be quite right in saying that he may be set as an example, not only to his fellow-workers in the evangelical field, but also to men of science at large. Alexander Wylie's name ought to be a pride to his profession and to his country. I only hope that full justice will be done to his memory.

Literary.

LECTURE ON PRESTER JOHN.

Early in the 5th century the Nestorian schismatics had branched off from the Church of Rome, and became in after years a great evangelizing power throughout Asia. From their chief centres of influence, first at Edessa, and afterwards at Nisibis in Persia, they were successively driven by the invading Mohammedan armies. Consequent on these movements, large numbers of men of cultivated intellects, and fired to some extent with the missionary spirit, spread themselves over the various countries, carrying the gospel even to the remotest regions of the East.

While the Church of Rome was slowly extending its boundaries among the Teutonic, Scandinavian and Sclavonic nations of Europe, the disciples of Nestorius were alike zealous in their labours among the equally barbarous Tartar and Scythic tribes of Asia.

The way was long,—the roads were with difficulty passable,—and intercourse between the two continents was comparatively infrequent; so that little was actually known in the West of the evangelistic progress of the Nestorians in the East. We are not without evidence, however, that in the earlier centuries they were abundant in labours, and that these labours were attended with marked success in the numbers who were brought to join their standard. Some idea may be had of the extent of their operations from a list preserved by Assemani, of twenty-four metropolitans during the 4th century, and fifty-six bishops, the stations forming a network over the continent extending from Damascus in the West to Mongolia in the East. [1] The Metropolitain seats are named in the order of their formation, in which we find China is the 12th; and as we know China enjoyed that dignity at least as early as the 8th century, we may take this as an evidence of their undoubted advance at that period.

1.—See Mosheim's *Historia Tartarorum Ecclesiastica*, Appendix p. 2.

Occasional intimations of what was going on as they reached Europe, should have been sufficient to gladden the Christian heart; but on the other hand, the certain intelligence of the frightful advances being made by the Mohammedan nations, was beginning to strike terror into thoughtful minds. The power of the Turkish princes was growing into such an alarming preponderance in Asia, and even wore such a threatening aspect towards Europe, as to be a source of great uneasiness to the Christian potentates of the West and especially to the Pope. Since the occupation of Jerusalem by the Seljukide atabegs, the pilgrims who visited the Holy Sepulchre had been exposed to indescribable miseries and cruelty. Pope Sylvester II was the first to propose a crusade against the infidels, but it was not till nearly a century later that Europe was ready for the execution of such a project. The far-famed Peter the Hermit visited Jerusalem in the year 1093, and what he then saw of the hardships and indignities to which the Christians were exposed roused all the powers of his impetuous nature, to avenge the injuries he had witnessed. On his return to Europe he was foremost among the agitators for a crusade. Although his appeals to the Pope of Rome and the Patriarch of Constantinople had met with but a lukewarm response, this was a zeal not to be so easily extinguished. From one country to another,—from city to city, this unwearying apostle continued to press upon the princes and statesmen the claims of his scheme; and the means he employed to inflame the minds of the people were still more remarkable. Other influences were at work in the same direction, and very various were the motives all tending to this central point. Suffice it to say, a crusade was resolved on under the patronage of His Holiness Urban II. Eight hundred thousand men left for the Holy Land in 1096; Jerusalem was taken from the Turks, and a Christian king set up.

Some fifty years after this, in 1145, the Catholic Bishop of Gabala in Syria made a journey to Europe, to lay certain complaints before the newly-elected Pope, Eugene III. While at Rome, he was met by Otto, Bishop of Freisinzen, to whom we are indebted for the account, and whose words I may quote, thus:—"We heard him bewailing with tears the peril of the Church beyond sea since the capture of Edessa, and uttering his intention on that account to cross the Alps and seek aid from the King of the Romans and the King of the Franks. He was also telling us how, not many years before, one John, *King* and *Priest*, who dwells in the extreme Orient beyond Persia and Armenia,

and is (with his people) a Christian, but a Nestorian, had waged war against the brother Kings of the Persians and Medes, who are called the Samiards, and had captured Ecbatana, of which we have spoken above, the seat of their dominion. The said kings having met him with their forces made up of Persians, Medes, and Assyrians, the battle had been maintained for three days, either side preferring death to flight. But at last Presbyter John (for so they are wont to style him), having routed the Persians, came forth the victor from a most sanguinary battle. After this victory (he went on to say) the aforesaid John was advancing to fight in aid of the Church at Jerusalem; but when he arrived at the Tigris, and found there no possible means of transport for his army, he turned northward, as he had heard that the river in that quarter was frozen over in winter time. Halting there for some years (?) in expectation of a frost, which never came, owing to the mildness of the season, he lost many of his people through the unaccustomed climate, and was obliged to return homewards. This personage is said to be of the ancient race of those Magi who are mentioned in the Gospel, and to rule the same nations that they did, and to have such glory and wealth that he uses (they say) only an emerald sceptre. It was (they say) from his being fired by the example of his fathers, who came to adore Christ in the cradle, that he was proposing to go to Jerusaleum, when he was prevented by the cause already alleged." [1] I have been thus particular in giving this extract, as it is the earliest notice extant of that remarkable half mythical individual, whose doubtful existence was the source of so much speculation for several centuries through the various countries of Europe.

It could not but be gratifying to Christian nations to hear that a powerful monarch in the far East had with his people espoused the Christian cause, assumed holy orders, and even incongruous as it might seem, taken up arms in its defence, making common cause with the Crusaders.

Two years later another crusade was organized for the recapture of Edessa, in which expedition Louis VII of France took the field; but the experience of the campaign was most disastrous, and a wretched remnant of the mighty army returned in 1149, having effected nothing,

The public mind was still somewhat alive to this question. The popular fanaticism indeed which had been awakened by Peter the Hermit had naturally subsided to a great extent, and the

1 (Ottonis Episcopi Frisingensis. Libri octo. Basileae 1569. L. 7, c. 33, p. 146 et 147.) Oppert's *Der Presbyter Johannes in Sage und Geschichte*, pp. 13, 14.

marvellous story brought over by the Bishop of Gabala, of a mighty Christian Priest and Monarch in the East, had almost faded from the memory, when several of the princes of Europe were taken by surprise to receive copies of an œcumenical letter addressed to them in 1165 by the redoubtable Prester John himself. A copy of that addressed to Emanuel, the emperor of Constantinople, has been preserved to us, and as it was the occasion of a great sensation at the time it may not be amiss to read some extracts from it. It runs thus :—

"John, Priest by the Almighty power of God and the strength of Our Lord Jesus Christ, King of Kings and Lord of Lords, to his friend Emanuel, Prince of Constantinople, greeting, wishing him health and the continued enjoyment of the Divine favour.

"It hath been reported to our Majesty that thou holdest our Excellency in esteem, and that the knowledge of our highness has reached thee.

"Furthermore we have heard through our secretary that it was the desire to send us some objects of art and interest, to gratify our righteous disposition. Being but human we take it in good part, and through our secretary we transmit to thee some of our articles. Now it is our desire and will to know if thou holdest the true faith, and in all things adherest to our Lord Jesus Christ, for while we know that we are mortal, people regarded thee as a god ; still we know that thou art mortal, and subject to human infirmities.

"If thou shouldest have any desire to come into the kingdom of our majesty, we will place thee in the highest and most dignified position in our household, and thou mayest abundantly partake of all that pertains to us. Shouldst thou desire to return, thou shalt go laden with treasures. If indeed thou desirest to know wherein consists our great power, then believe without hesitation, that I, Prester John, who reign supreme, surpass in virtue, riches and power all creatures under heaven. Seventy kings are our tributaries. I am a zealous Christian and universally protect the Christians of our empire, supporting them by our alms. We have determined to visit the sepulchre of our Lord with a very large army, in accordance with the glory of our majesty to humble and chastise the enemies of the cross of Christ and to exalt his blessed name.

"Honey flows in our land, and milk everywhere abounds. In one region there no poison exists and no noisy frog croaks, no scorpions are there, and no serpents creeping in the grass.

"No venomous reptiles can exist there or use there their

deadly power. In one of the heathen provinces flows a river called the Indus, which issuing from Paradise, extends its windings by various channels through all the province; and in it are found, emeralds, sapphires, carbuncles, topazes, chrysolites, onyxes, beryls, sardonyxes, and many other precious stones.

"Between the sandy sea and the aforesaid mountains, is a stone in a plain, of incredible medical virtue which cures Christians or Christian candidates of whatever infirmities afflict them, in this manner. There is in the stone a mussel-shaped cavity, in which the water is always four inches deep, and this is kept by two holy and reverend old men. These ask the new-comers whether they are Christians, or desire to be so, and then if they desire the healing of the whole body, and if the answer is satisfactory, having laid aside their clothes they get into the shell; then if their profession is sincere, the water begins to increase and rises over their heads; this having taken place three times, the water returns to its usual height. Thus every one who enters, leaves it, cured of whatsoever disease he had.

"For gold, silver, precious stones, animals of every kind and the number of our people, we believe there is not our equal under heaven. There are no poor among us; we receive all strangers and wayfarers; thieves and robbers find no place among us, neither adultery nor avarice. When we go to war we have carried before us fourteen golden crosses ornamented with precious jewels, in the place of banners, and each of these is followed by ten thousand mounted troopers and a hundred thousand infantry; besides those who are charged with the care of the baggage, carriages and provisions.

"Flattery finds no place; there is no division among us; our people have abundance of wealth; our horses are few and wretched. We believe we have no equal in the abundance of riches and numbers of people. When we go out at ordinary times on horseback, our Majesty is preceded by a wooden cross, without decoration or gold or jewels, in order that we may always bear in mind the passion of our Lord Jesus Christ. Also a golden vase full of earth to remind us that our body must return to its original substance-the earth. There is also a silver vase filled with gold borne before us, that all may understand that we are Lord of Lords. Our magnificence abounds in all wealth, and surpasses that of India.

"The palace in which our sublimity dwells, is after the pattern of that which the holy Thomas erected for king Gundoforo, and resembles it in its various offices, and everything in the

other parts of the edifice. The ceilings, pillars and architraves are of rarest wood. The roof of the same palace indeed is of ebony, lest by any means it might be destroyed by fire or otherwise. At the extremities, over the gables are two golden apples in each of which are two carbuncles, that the gold may shine by day, and the carbuncles sparkle by night. The larger palace gates are of sardonyxes, inlaid with snake's horn, so that nothing poisonous may enter. The others indeed are also of ebony. The windows are of crystal. The tables on which our courtiers eat are some of gold and some of amethyst. The standards supporting the tables are some of ebony and some of amethyst. In front of the palace is the court in which our justice is accustomed to watch the combatants. The pavement is of onyx, in order that by virtue of the stones the courage of the combatants may be increased. In the aforesaid palace, no light is used at night, but what is fed by balsam. The chamber in which our sublimity reposes is marvellously decorated with gold and stones of every kind.

"At our table, thirty thousand men, besides occasional visitors are daily entertained; and all there partake of our bounty whether it be for horses or other expenses. This table made of the most precious emeralds is supported by four amethyst pillars; by virtue of which stone, no person sitting at the table can become inebriated.

"Every month we are served in rotation by seven kings, sixty two dukes, and two hundred and sixty five counts and marquises, besides those who are sent on various missions in our interest.

"Twelve archbishops sit on our right at table to meals every day, and twenty bishops on our left. The Patriarch of St. Thomas, the metropolitan of Samarcand, and the bishop of Susa where our glory resides and our imperial palace is, each in his turn is ever present with us.

"If again thou askest how it is that the Creator of all having made us the most superpotential and most glorious over all mortals,—does not give us a higher dignity or more excellent name than that of Priest (Prester)? Let not thy wisdom be surprised on this account; for this is the reason. We have many ecclesiastics in our retinue of more dignified name and office in the Church, and of more considerable standing than ours in the divine service. For our house steward is a patriarch and king. Our cup-bearer is an archbishop and a king. Our chamberlain is a bishop and a king. Our archimandrite, that is chief pastor

or master of the horse is a king and abbot. Wherefore our highness has not seen it repugnant to call himself by the same name and to distinguish himself by the order of which our court is full. And if we have chosen to be called by a lower name and inferior rank, it springs from humility. If indeed you can number the stars of heaven and sands of the sea, then you may calculate the extent of our dominion and power."*

Such is the notable epistle that has been handed down to us as professedly emanating from this famous individual, whose existence is all but a myth, whose history is a riddle, and yet who has enjoyed a reputation throughout Europe for some five or six centuries, almost equal to that of some of the greatest heroes of history during the same period. As we have already seen, prior to the date of this letter, there is at least one record extant of the doings of Prester John, which was brought to Europe by the Bishop of Gabala. There may have been other reports which have not come down to us. The widespread renown of our hero, however, would seem to date from the publication of this wonderful missive. Marvellous are the tales that have been told of this eastern potentate; stories have been written in every language.† ballads have been sung, legends have been handed down:—his name has been the theme of the proverb, and his fame has been perpetuated in many an old saw.‡ But stranger almost than all the strange things that have been said about him, is the account that he gives of himself in the preceding letter. Shall we believe the document is genuine, or shall we reject it as a forgery of later

* *Der Presbyter Johannes in Sage und Geschichte*, pp. 167–179.

† In the Registers of the Stationer's Company it is recorded, under the date March 12th, 1582, that Thomas Easte was licensed to print "Pretor John's land."

‡ Mosheim in his *Historia* tells us that the fame of the felicity of Prester John's Land, was—even in his time, in Germany, still commemorated in such sayings as:—*Er meinet, er sey in des Priester Johannes Lande.* "He thinks he is in Prester John's land," and *Er lebet so vergnügt, als wäre er in des Priester Johannes Lande.* "He lives as pleasantly as if he were in Prester John's land."

times? Both sides have had their advocates; and it may be there is something to be said for either; but where doctors of such learning and discrimination have differed, I shall certainly hesitate to pronounce a decision. Letters similar to the above were said to have been sent to the Emperor of Rome, the Pope, King Louis 7th of France and the King of Portugal. The historian Petis de la Croix tells us that in his time these letters were still to be seen, and implies that he had seen the one addressed to the King of France.* Anyhow we have the authority of Mr. D'Avezac† for saying that there are at the present day in the National Library at Paris "letters *from Prester John to the Emperor of Rome and the King of France*, without name of place, date or paging, printed in Gothic letters on twelve sheets."

Not only was the prestige of Prester John spread far and wide among the millions of Europe, but even the dignitaries in high places could not, or did not feel disposed to, ignore his existence. Accordingly we find, twelve years after the date of the letter, Pope Alexander 3rd reciprocating the courtesy, and there can be little doubt at least of the genuineness of the letter bearing his name, which runs as follows:—

* *The History of Gengizcan the Great*, p. 24.

† *Recuil de Voyages et de Mémoires*, tome iv, p 549, note 1.

Note.—The above two pages are what is referred to in the Table of Contents as missing, the manuscript having since been found. Their publication gives an opportunity also to correct the name of the Pope mentioned in the Table, which should be Alexander III.

"The Bishop Alexander, servant of the servants of God, to his dearest son in Christ, the renowned and lordly king of India and high Priest, sends his greeting and apostolic blessing.

"Lately we have understood through divers reports and by popular rumour, that thou, whilst thou professest the Christian faith, art incessantly engaged in pious works, and directest thine aim on godly things. On this account our beloved son, Master Philip, our private physician and friend, hath affirmed regarding thy pious designs and projects which thou entertainest with noteworthy and respectable men of thy kingdom in those parts,—as it was related to him by a prudent, trustworthy, circumspect and discreet man,—repeatedly urging it on our attention:—From such a one he heard it distinctly stated that it was thy will and thy design to learn the catholic and apostolic discipline. May one of thy warmest wishes be accomplished, that neither thou nor the nations relying on thine elevation, may ever admit anything into your creed, which may be offensive to the teaching of the apostolic chair, and thereby lead to a misunderstanding. And in regard to this, we share with thee, our dearly beloved son, the most cordial joy; but to Him who is the bestower of every gift, we are indescribably indebted, and have added vow upon vow, and prayer upon prayer, that He who has led thee to take the name of Christian, may enlighten thy mind by his unspeakable love; since thou desirest absolutely to experience, what it is to observe the Christian religion which is before all creeds.

Meantime we who, notwithstanding our unworthiness have been raised to the chair of St. Peter, and acknowledge ourselves in the words of the apostle, as debtor to the wise and to the unwise, to the rich and to the poor, are zealously troubled about thee and thy welfare, and would, as is due from our dominant station, dissuade thee from retaining that position, in which you err from the Christian and Catholic faith. For the Lord himself said to St. Peter, whom he appointed chief of all the apostles; 'And when thou art converted, strengthen thy brethren.'

"Difficult and dangerous as it may seem,—through such numerous hardships and manifold perils, by a first journey through distant and unknown lands,—to send an envoy from our side to thee; yet having proved the obligation resting on us, and considered thy plans and designs, we have despatched to thee, the above-named Philip, our private physician and confidant, a trustworthy, circumspect and prudent man, appointed as our

confidential messenger in Christ, to thy highness. In case thou continuest to persevere in thine intention and effort, which as we learn God has put in thy heart, then it is needful that thou shouldest be informed without delay, in regard to the Christian faith, wherein thou and thine differ from us, that thou shouldest entertain no fear, that thine errors might hinder the salvation of thee and thine, or that your Christian name should be tarnished. Therefore we request thy Royal Highness,—we remind and exhort thee in the Lord,-that thou receive with becoming favour, the said Philip, out of reverence for St. Peter and for us, as a genuine, trustworthy and prudent man, come from our residence, and treat him with respectful courtesy. And if it is thy will and thine intention, as it must also be, to study the apostolic discipline in regard to those points which the same Phillip, on our behalf will lay before thee, then attend carefully to what he says and try to understand him, and send respectable men to us, and a letter sealed with thy signet, through which we may understand thy design and thy wish."

Such was the dispatch with which Philip the physician set out for the court of Prester John. Whether he or the document was ever so fortunate as to reach that destination, we have no means of knowing, as history makes no further mention of the circumstance, and it is uncertain even in what direction he bent his steps.

Just about that time events were beginning to take shape in the east, which brought on one of the mightiest political movements the world has ever witnessed. The conqueror Genghis was entering manhood. Already he had given an earnest of his future prowess ; and that train of sanguinary conflict had already commenced, which was to issue in the conquest of nearly all Asia, and a part of Europe to the Mougul rule. For more than half a century the public attention was diverted from Prester John, and directed to matters more urgent in regard to their consequences ; the irruption of the hordes of Tartars into Russia, who had carried all before them in their onward progress through the centre of Asia ; their line of march everywhere marked by the most frightful carnage and devastation. They had already penetrated into the heart of Hungary, when the news of the death of the Emperor Ogodai, the son of Genghis Khan in 1241, was the occasion of this unwieldy army of savages hastily retracing their steps.

Ferocious as was the character of the swarms of invaders that threatened the independence and the lives of the inhabitants

of Europe, it must have been no small relief to learn that, from any cause,—they had turned their faces eastward, and that the danger which so recently was imminent, was turned aside for a time at least. As it was uncertain, however, whether they might not make their reappearance at any time, it was long before a feeling of security could be restored. The terror spread by these barbarians induced Innocent IV, who had been recently elevated to the pontificate,—after having preached a crusade against them in Europe,—to resolve on a diplomatic mission to their headquarters in the East, to conjure them in the name of his Holiness to stay the work of extermination; and also to disseminate among them a knowledge of Christian truth.

John of Plano Carpini, an Italian friar, and a distinguished member of the order of St. Francis, was selected for this remarkable mission,—and furnished with letters from the Pope, he left Lyons with a companion, on April 16th, 1245, being then over sixty years of age.

On the 22nd of July, 1246, he arrived with his companion at the court of Cujuc, the emperor elect; and during his stay, the elevation of this prince to the imperial dignity took place.

Well-nigh starved during their sojourn at the court of the Great Khan, John and his companion were glad doubtless to receive their dismission on the 13 November, and making all speed on their way back presented themselves before his Holiness early in July following. Plan Carpin was familiar with the popular tales and the marvellous things said about the mighty Christian prince Prester John; and we may be sure, a man of his intelligence would improve the opportunity of gaining some information regarding this potentate, the fame of whose power and doings had created such a sensation in the West. The single scrap of intelligence on this point in the friar's narrative, has tended rather to complicate than to solve the mystery of this monarch's existence. After stating the conquest of the black Saracens of India Minor by one of the sons of Genghiz, he says "the armie marched forward to fight against Christians dwelling in India maior. Which the King of that countrey hearing (who is commonly called Presbiter John) gathered his souldiers together, and came forth against them. And making mens images of copper, he set each of them upon a saddle on horsebacke, and put fire within them, and placed a man with a pair of bellowes on the horse backe behind every image. And so with many horses and images in such sorte furnished, they marched on to war against the Mongals or Tartars. And comming neare unto the place of the battell, they first

of all sent those horses in order one after another. But the man that sate behind laide I wote not what upon the fire within the images and blew strongly with their bellowes. Whereupon it came to passe; that the men and the horses were burnt with wilde fire, and the ayre was darkened with smoake. Then the Indians cast darts upon the Tartars, of whom many were wounded and slain. And so they expelled them out of their dominions with great confusion nether did we heare, that ever they returned thither againe." [1]

Even with our present knowledge of India and the adjoining lands, it is not easy to determine the kingdom here alluded to; but as we shall see Friar John's brief notice finds its place in the chain of evidence by which we seek to identify Prester John.

In the summer of 1253, Louis IX of France, known as St. Louis, having heard much of the favourable disposition of the Mongol princes towards Christianity, and having already sent a mission to Kara-korum at the time Mangu ascended the throne, now resolved again to dispatch the Franciscan monk, William de Rubrusquis, on a specially religious mission, with a view to extend the knowledge and influence of Christianity among the subjects of the great Khan. After a protracted journey of more than two years, he returned to his convent on the coast of Palestine on the 15th of August, 1255. The narrative of his journey is no less full of interesting details than that of Plan Carpin; and from it one or two extracts bear upon the subject of the present lecture, Speaking of the great nation of the Karaeatay he says:—"These Cathayans dwelt among the high mountains over which I travelled; and in a plain between these mountains, there was a certain powerful Nestorian pastor and lord over the people called Naiman, who were Nestorian Christians. On the death of the Coircan (i.e. khan of the Caracatayans), this Nestorian raised himself to the kingdom, and the Nestorians called him King John, and said ten times more of him than was true. For such is the manner of the Nestorians coming from those parts: they raise great rumours out of nothing, and so have disseminated the statement that Prince Sartach and Mangu Khan and Ken Khan are Christians, because they give more honour to Christians than other people, yet in truth they are not Christians. In this way therefore the great fame of that King John has gone forth; but though I passed through his pastures, nobody knew anything about him except a few Nestorians. Ken Khan now occupies his pastures, and brother Andrew visited his court, and I

[1] *The Principal Navigations, &c.* p. 58.

also passed by it on my return. This John had a brother, a powerful pastor, named Unc; and he lived beyond the high mountains of Karacatay, at a distance of three weeks from his brother, being lord of the town of Karakorum, having under him the tribes of Crit and Merkit, who were Nestorian Christians. But their lord himself had abandoned the worship of Christ and followed idols, having with him idol priests, who are all devotees of devils and of sorcery. At ten or fifteen days distance beyond these pastures, were the Mongol pastures, belonging to a people of the poorest class, without a chief and without laws, except sorcery and divination, which are attended to by all in those parts. And next to the Mongols was another poor tribe called Tartars. King John having died without heir, his brother Unc who was rich caused himself to be proclaimed khan, his herds and his people extending to the Mongol boundary. At that time there was a certain smith named Chingis among the Mongols, who carried off the cattle of Unc Khan, insomuch that the herdsmen of Unc Khan complained to their lord. The latter then gathered a host and rode into the Mongol territory, seeking Chingis himself, but he fled and concealed himself among the Tartars. Unc then returned with plunder taken from the Mongols and the Tartars. Chingis then addressed the Tartars and Mongols saying:—'It is because we have no head that we are thus oppressed by our neighbours.' They thereupon elected him leader and chief of the Tartars and Mongols. Then secretly gathering an army they rushed upon Unc and defeated him, while he fled into Cathay. His daughter was there taken captive by Chengis, who gave her as wife to one of his sons, from whom sprang him who now reigns as Mangu Khan." [1]

In a later chapter of his narrative Rubruquis says:—

"But the foresaid Ingures (who live among the Christians and the Saracens) by their sundry disputations, as I suppose, have been brought unto this, to believe that there is but one only God. And they dwelt in certain cities, which afterward were brought in subjection to Chingis Can: whereupon he gave his daughter in marriage unto their king. Also the citie of Caracarum itselfe is in a manner within their territory: and the whole countrey of king or Presbyter John, and of his brother Vut (Unc) lyeth neere unto their dominions: saving, that they inhabit in certaine pastures northward." [2]

1 *Recueil de Voyages et de Mémoires publié par la Société de Geographie*, tom. iv, pp. 260-262.

2 *The Principal Navigations, &c* p. 116.

One other slight mention of the royal Priest we find in Rubruquis, in describing his journey towards Karakorum. Having narrated his passage across the goblin desert, he continues :—" After that we entered the plain in which was the court of Ken Khan, which was formerly the land of the Naiman, who were the people of Prester John." [1]

According to the narratives of these two Franciscan monks then, we learn that there really was an Asiatic potentate generally known by the name of Prester John, while there is a very general accordance between the two travellers as to the site of his empire all the indications pointing to the neighbouthood of the Celestial mountains. The memory of his reputation and his doings however seem to have made a less permanent impression in the east than in the west. It will be observed Rubruquis says that Prester John had a brother named Unc, and that when king John died without heir, Unc caused himself to be proclaimed Khan of the Keraites. It is somewhat strange that the traveller should have said nothing about Unc having assumed the Papal authority also, if such was the case, and the fact of his silence on the subject, taken in connection with other circumstances, induces me to doubt the accuracy of the tradition prevalent at a later date, that Unc Khan was the famous Prester John.

Nearly twenty years after Rubruquis, the Venetian traveller Marco Polo was over the same ground, and lived many years in China. No doubt his report of the transactions of the time is such as was current among the Mongols, but there is a suspicion that his identification of the Kerait prince as the Prester John of history was derived from Persian sources. As however it tallies with the accounts given by the Persian and Arabian histories, it may be well to quote his account :—

"Originally the Tartars dwelt in the north on the borders o Chorcha. Their country was one of great plains ; and there were no towns or villages in it, but excellent pasture lands, with great rivers and many sheets of water ; in fact it was a very fine and extensive region. But there was no sovereign in the land. They did, however, pay tax and tribute to a great prince who was called in their tongue Unc Can, the same that we call Prester John, him in fact about whose great dominion all the world talks. The tribute he had of them was one beast out of every ten, and also a tithe of all their other gear. Now it came to pass that the Tartars multiplied exceedingly. And when Prester John saw how

1 *Recueil de Voyages et de Mémoires*, tom. iv, p. 295.

great a people they had become, he began to fear that he should have trouble from them. So he made a scheme to distribute them over sundry countries, and sent one of his Barons to carry this out. When the Tartars became aware of this, they took it much amiss, and with one consent they left their country and went off across a desert to a distant region towards the north, where Prester John could not get at them to annoy them. Thus they revolted from his authority and paid him tribute no longer. And so things continued for a time. Now it came to pass in the year of Christ's Incarnation 1187 that the Tartars made them a king whose name was Chinghis Khan. He was a man of great worth, and of great ability [eloquence] and valour. And as soon as the news that he had been chosen King was spread abroad through those countries, all the Tartars in the world came to him and owned him for their Lord. And right well did he maintain the sovereignty they had given him. What shall I say? The Tartars gathered to him in astonishing multitude, and when he saw such numbers he made a great furniture of spears and arrows and such other arms as they used, and set about the conquest of all those regions till he had conquered eight provinces. When he conquered a province he did no harm to the people or their property, but merely established some of his own men in the country along with a proportion of theirs, whilst he led the remainder to the conquest of other provinces. And when those whom he had conquered became aware how well and safely he protected them against all others, and how they suffered no ill at his hands, and saw what a noble prince he was, then they joined him heart and soul and became his devoted followers. And when he had thus gathered such a multitude that they seemed to cover the earth, he began to think of conquering a great part of the world. Now in the year of Christ 1200 he sent an embassy to Prester John, and desired to have his daughter to wife. But when Prester John heard that Chinghis Khan demanded his daughter in marriage he waxed very wroth, and said to the Envoys, 'What impudence is this, to ask my daughter to wife! Wist he not well that he was liegeman and serf? Go ye back to him and tell him that I had rather set my daughter in the fire than give her in marriage to him, and that he deserves death at my hand, rebel and traitor that he is!' So he bade the Envoys begone at once, and never come into his presence again. The Envoys, on receiving this reply, departed straightway, and made haste to their master, and related all that Prester John had ordered them to say, keeping

nothing back. When Chinghis Khan heard the brutal message that Prester John had sent him, such rage seized him that his heart came nigh to bursting within him, for he was a man of a very lofty spirit. At last he spoke, and that so loud that all who were present could hear him: "Never more might he be prince, if he took not revenge for the brutal message of Prester John, and such revenge that insult never in this world was so dearly paid for. And before long Prester John should know whether he were his serf or no!" So then he mustered all his forces, and levied such a host as never before was seen or heard of, sending word to Prester John to be on his defence. And when Prester John had sure tidings that Chinghis was really coming against him with such a multitude, he still professed to treat it as a jest and a trifle, for quoth he, "these be no soldiers." Nevertheless he marshalled his forces and mustered his people, and made great preparations, in order that if Chinghis did come, he might take him and put him to death. In fact he marshalled such a host of many different nations that it was a world's wonder. And so both sides got them ready to battle. And why should I make a long story of it? Chinghis Khan with all his host arrived at a vast and beautiful plain which was called Tanduc, belonging to Prester John, and there he pitched his camp; and so great was the multitude of his people that it was impossible to number them. And when he got tidings that Prester John was coming, he rejoiced greatly, for the place afforded a fine and ample battle-ground, so he was right glad to tarry for him there, and greatly longed for his arrival. Now the story goes that when Prester John became aware that Chinghis with his host was marching against him, he set forth to meet him with all his forces, and advanced until he reached the same plain of Tanduc, and pitched his camp over against that of Chinghis Khan at a distance of 20 miles. And then both armies remained at rest for two days that they might be fresher and heartier for battle. So when the two great hosts were pitched on the plains of Tanduc as you have heard, Chinghis Khan one day summoned before him his astrologers, both Christians and Saracens, and desired them to let him know which of the two hosts would gain the battle, his own or Prester John's. The Saracens tried to ascertain, but were unable to give a true answer; the Christians however did give a true answer, and showed manifestly beforehand how the event should be. For they got a cane and split it lengthwise, and laid one half on this side and one half on that, allowing no one to touch the pieces. And one piece of cane they called

Chinghis Khan, and the other piece they called Prester John. And then they said to Chinghis: "Now mark! and you will see the event of the battle, and who shall have the best of it; for whose cane soever shall get above the other, to him shall victory be." He replied that he would fain see it, and bade them begin. Then the Christian astrologers read a Psalm out of the Psalter, and went through other incantations. And lo! whilst all were beholding, the cane that bore the name of Chinghis Khan, without being touched by anybody, advanced to the other that bore the name of Prester John, and got on the top of it. When the prince saw that, he was greatly delighted, and seeing how in this matter he found the Christians to tell the truth, he always treated them with great respect, and held them for men of truth for ever after. And after both sides had rested well those two days, they armed for the fight and engaged in desperate combat; and it was the greatest battle that ever was seen. The numbers that were slain on both sides were very great, but in the end Chinghis Khan obtained the victory. And in the battle Prester John was slain. And from that time forward, day by day, his kingdom passed into the hands of Chinghis Khan till the whole was conquered. I may tell you that Chinghis Khan reigned six years after this battle, engaged continually in conquest, and taking many a province and city and stronghold. But at the end of those six years he went against a certain castle that was called Caaju, and there he was shot with an arrow in the knee, so that he died of his wound. A great pity it was, for he was a valiant man and a wise."[1]

Thus far Marco Polo, whose narrative appears to be true in the general outline, though there is obviously some confusion in the order of dates and events. Unc Khan, the chief of the Kerait tribe, is a name not unknown in history, and there are detailed accounts in the Chinese and Mongol annals of his intercourse with Chinghis Khan for a number of years, first as a friend and protector, afterwards as an enemy and a vanquished foe. He was not killed however as Marco says, in his battle with Chinghis; but escaped by flight and was put to death by his kinsman the Khan of the Naimano.

How far Unc Khan sustained the Christian character it is difficult to say. Rubruquis tells us that he 'abandoned the worship of Christ and followed idols; but he tells us also that the Kerait and Merkit tribes over whom he ruled were Nestorian

1 Yule's *The Book of Ser. Marco Polo* vol. i. pp. 204-206.

Christians, and there is reason to believe that he also retained the Christian name.

Rubruquis says that when Unc Khan fled from the Mongols, his daughter was taken captive by Genghis Khan, who gave her to his fourth son Tolui to wife. From more reliable authority we learn that this was Sorhahtani the niece of Unc Khan, and not his daughter. She had the honour of being th mother of the Kubla Khan, and in the national history of the Yuen dynasty it is distinctly stated that after her death, her tablet was placed in a Nestorian church in the department of Kan-suh.[1] This appears decisive as to her having professed the Christian faith during life.

Such is the generally accepted story of Prester John; but it seems probable that the renown of this half-mythical potentate must have been of earlier date than the Kerait chief Unc Khan. This we may infer from the report of the Bishop of Gabala in 1143. In an Arabian author[2] of the XIV century, we find a curious story, which though difficult to accept in its purity, may serve as an indication of the great progress Nestorian Christianity was making in Eastern Asia in the beginning of the XI century The story runs thus:—"In the year A.D. 1001, the Nestorian patriarch John received a letter from Ebedjesus, the metropolitan of Merv in Khorassan, to the following effect:—"The king of a Tartar people called Berita while thoughtlessly pursuing the game, lost his way among unknown paths. When driven to despair of finding his way home, a holy man appeared to him in a vision and promised to direct him, on condition that he would accept the name and the doctrine of Jesus Christ. The king immediately acquiesced and was put in the right way by the holy man. On reaching home he sent for certain Christian traders who were living in his camp, and learned from them the way of salvation through Christ. Having embraced the doctrine, he sent to the Metropolitan of Merv desiring baptism; and enquired at the same time what he should do in the matter of fasting, as they had nothing to live on but flesh and milk. When these things came to the knowledge of Ebedjesus, he communicated the information to the patriarch. The patriarch directed him to send to the Tartar camp, two priests and two deacons, to baptize all who should be converted; and as to seasons of fasting, he ordered that they should abstain from flesh but might use milk. It is added that the Tartar chief

1 See *The Chinese Recorder and Missionary Journal*, vol. vi, p. 104.

2 Abulfaragius. *Chron. Syr.*

and two hundred thousand of his subjects were converted to the Christian faith. The chief appears to have been baptized under the name of John.[1] Hence Mosheim sets him down as the first Prester John; but it is not clear that he was ever so designated by contemporary historians.

There is much reason to believe however that a seed of fact lies at the root of the preceding story; and in passing from mouth to mouth, according to the natural genesis, the facts would lose nothing in bulk by the transit; till they ultimately developed in the marvellous history of Prester John.

From the same historian who has preserved the above narrative we receive the account of another great Christian movement under a leader named Nasarath, whom Mosheim designates the second Prester John.

He says:—In the year 1046 the Nestorian Metropolitan of Samarcand sent a letter to the Patriarch, which was read in the palace of the Caliph of Bagdad. A people, said he,—numerous as locusts, have opened for themselves a passage across the mountains between Thibet and Khoten, which the old historians state to have been closed by Alexander. Thence they have penetrated to Kashgar. There are seven Kings, each of whom has under him seventy thousand horsemen; the principal one is named Nasarath, meaning Chief by the command of God. They are of swarthy complexion like the Indians; they neither wash the face, nor cut their hair, but plait it in the fashion of a tiara, with which they cover the head as with a helmet. They are excellent archers, Their food is simple and they eat little. They cultivate humanity and justice above all. Their horses eat flesh."[2]

This evidently refers to the great power the Nestorians were gaining among the semi barbarous tribes of Central Asia, and may possibly allude to the Chief, the renown of whose line was afterwards spread abroad as the family of Prester John.

So far then all we have read about the country of Prester John obviously points to Tartary or Turkestan, and it may be to the North of Hindustan. Subsequent to the XIII century, the excitement regarding this individual seems to have subsided for a time; and consequent on the political changes that took place in Asia after the Mongol invasion, and the rapid increase of the Mohammedan power, the memory of Prester John and his Kingdom had well nigh faded away, or was only retained as a vision of

1 See *Historia Tartarorum Ecclesiastica*; p.p. 23 and 24

2. *Historia Tartarorum Ecclesiastica*, p. 25.

dream land, respecting which no one had really any reliable information.

By one of those strange freaks that we meet with occasionally in mediæval legends, we now find the story of Prester John transmigrating from Central Asia to Northen or Central Africa. It is not very easy to trace the process by which this was brought about; but like the dissolving views of the magic lantern, as the Asiatic vision disappeared the African tableau gradually came in sight. The Abyssinian pilgrims who visited Jerusalem in the XV century, carried with them glowing accounts of the powerful Christian monarch ruling in that country, and it was an easy step to attach to this prince the shadowy conceptions and the name of Prester John still extant. It must be admitted the descriptions in some of the old writers favoured this idea;—Plan Carpin spoke of him as the King of India Major. Other authors describe Prester John's subjects as Ethiopian Indians. Bishop Jordan of Catalan, writer of the IV century, says distinctly that Prester John was the Emperor of Ethiopia, which he calls *Tertiâ India*[1] and Marco Polo himself calls Abyssinia, the Middle India. From the time of Virgil downwards the names of India and Ethiopia have been occasionally interchanged. Many authorities might be quoted to the same effect; suffice it to say that in a letter from John of Lastie, Grand Master of the Knights of Rhodes to Charles VII of France, dated July 3rd 1448, he speaks, in the most unequivocal terms, of Prester John of India as the King of Abyssinia.[2] Just about this time the Portuguese were becoming fired with a zeal for geographic exploration; and the problem of Prester John, while it presented a point for investigation, was indeed an incentive to some of the daring voyages undertaken by those hardy navigators.

In 1486, an ambassador from the King of Benin on the west coast of Africa, who accompanied John Alphonso d'Aveiro, back to Portugal, for the purpose of forming an alliance with that Kingdom, and to procure preachers of the Gospel to instruct the King and his subjects in Christianity,—stated that at a distance of three hundred leagues from the Kingdom of Benin, in the centre of the continent, there was a powerful monarch named Ogane, who held spiritual and temporal rule over all the neighbouring Kings; that the King of Benin like the others, on coming to the crown, received his investiture from him, the tokens of which

1. *Recueil de Voyages et de Memoires*, tome quatrieme, p. 56.

2. In a map published by Andrea Bianco in 1436, the Empire of Prester John is located in Ethiopia.

were a pilgrim's staff by way of sceptre, a kind of cap instead of a crown, and a brass cross. This prince was never seen by the ambassadors who resorted to his court; but on audience days he exhibited one of his feet, which they kissed; and on their departure a cross was suspended to their necks, which exempted them from state service for the future. On hearing this, King John II of Portugal despatched two envoys, Peter of Covillan and Alphonso of Paiva, to discover this famous potentate. On May 7th 1487 they received their credentials, and proceeding by Naples, Rhodes, Alexandria and Cario, they reached Aden together. There they parted company. Paiva crossed over to Ethiopia, while Covillan went on to the Indian peninsula, and re-embarking at Goa, returned to Aden and Caivo where the two travellers had agreed to meet. There he learnt that Paiva was dead; but he found two Jews waiting for him with new orders from the court of Portugal. To one of these he entrusted a full narrative of his travels, and left in company with the other, with whom he proceeded to Ormuz. There Covillan parted with his fellow traveller, and returned by the Red sea to pursue his researches in quest of the Prince whom he had already so long sought in vain. At length he discovered the object of his search in Iscander the King of Abyssinia, Covillan's credentials having been examined by this Prince, he treated the envoy with great favour, and appeared desirous of forming an alliance with Portugal. But death interrupted future negotiations, and the Prince was succeeded by his brother Nahu, who adopted a different policy, and forbade the return of Covillan to his native country. The latter seeing no hope of release, married and settled down there.

Nahu, however, had but a short reign and died soon after his brother. He was succeeded by his infant son David, whose mother was regent. This Princess indeed resolved on an embassy to the King of Portugal, but fearing Covillan might not come back, she selected an Armenian Christian named Matthew, who had been before engaged in diplomatic negotiations for her. By him she sent a golden casket containing a piece of the *true cross*, as a present to the King of Portugal. [1]

As the Portuguese monarch had laid upon Convillan the injunction to find Prester John at all hazards, it was incumbent on him to find some one answering to his description, and there appeared to be so many things about the character and surroundings of tho Abyssinian Prince, corresponding with the tradition, that the report he sent home was received with enthusiasm at the

1. *Der Presbyter Johannes in Sage und Geschichte*, pp. 7, 8.

Portuguese court, and soon found general currency throughout Europe. Moreover the arrival of the Abyssinian ambassador, and the wonders he told of the Christian Prince and his dominion, tended to strengthen the general belief. Nor was it merely a popular story credited by the ignorant multitude. It was espoused and defended by some of the most learned men of the age. In John of Linschoten's summary of the Kings of Portugal, he says of Don Manuel,—"This King did first discover, and by his captains and soldiers, conquered the countries and passages into the East Indies, and the oriental countries for spices, and also the havens and passages in Prester John s land."

There is in the British Museum a M.S. letter from King Emmanuel to the Pope, dated June 6, 1513, describing the successes in India, the battles and bloodshed of his general Alfonso de Albuquerque. He says:—"He.....sailed to Dabuli, received an embasy from Prester John, who requested him to cross the Red Sea, and unite with himself in war against the infidels. He has sent home to the King a large fragment of the wood of the true cross, and asks to have some clever workmen, in order that he may divert the Nile from the country of the Sultan. There was with him at the time the Ambassador of the Pagan King of Narsinga, who had 1,500 elephants of war, 40,000 horses, as much foot as he wishes, and so much territory as can scarce be traversed in six months. There was also with him an ambassador from the King of Cambaya from Sabay, formerly Lord of Goa, and King Grosapa, with presents and offers of alliance. In the last fleet that appeared was an ambassador from the King of Ormus with a present of pearls and jewelery..... Alfonso will effect a union with Prester John, and raising the standard of the cross will inflict a blow upon Mohammedanism.[1]"

In fact, every traveller who touched on the coast of Africa during the XVI century, seems to have thought it incumbent on him to tell us something about Prester John.

John Hughen of Linschoten, who made a voyage to the East Indies and China about the year 1592, and called at many places on the African coast gives us some account of a subsequent Prester John, whom he calls the greatest and the mightiest prince in all Africa. His country beginneth from the entrance into the Red sea, and reacheth to the island of Siene lying under the Tropic of Cancer, excepting the coast of the same sea, which the Turke within these fifty years hath taken from him. To set down the greatness of all the countries which this Christian king

1. *Calendar of State Papers, Colonial Series, East Indies, China and Japan*, pp. 1, 2.

hath under his commandment, they are in compass 4,000 Italian miles. The chief city thereof, and wherein he is most resident is called Belmalechi, his government is over many countries and kingdoms that are rich and abundant in gold, silver, and precious stones, and all sorts of metals. his people are of divers colours, white, black and between both, of a good stature and proportion. The people are Christians but hold certain ceremonies of the Jewish law, and upon the day of the Conception of the Virgin Mary, all the kings and princes under his obedience, do come unto the said town of Belmalechi, there to celebrate the feast, every man bringing with him such treasure or yearly tribute as he is bound to pay, and at the same feast the people come hither in pilgrimage to honour it, whereupon that day there is a great procession, and out of the church from whence they come, they bring an image of the Virgin Mary, in form like a man of massive gold, and where the eyes should be, it hath two great rubies, the rest of the whole image being wrought with excellent workmanship, and set with many precious stones, laying it on a bier of gold very cunningly wrought. At this procession Prester John himself is personally present, either sitting in a chariot of gold, or riding on an elephant most richly trapped, himself apparelled in most strange and costly cloth of gold, all embroidered and set with pearls and stones most sumptuous to behold: to see this feast and image the people run in so great troops, that by reason of press, many are thrust to death.

The notorious Ferdinand Mendez Pinto gives a curious account of a visit to the mother of Prester John in 1538. The infant prince David III, who had succeeded to the throne in 1508, during Covillan's residence there, was still king, but his mother held a very conspicuous place in the government if we may believe the traveller.

Just about this time negotiations were in progress which led to the formation of the celebrated East India Company. The application of the merchants to Queen Elizabeth pointed out the limits of the Spanish and Portuguese conquest and the facilities for trade in the east. The memorial was handed over by her Majesty to the celebrated Fulke Greville, who in his report thereon (dated March 10th, 1600) to Sir Robert Cecil, the Secretary of State, remarks that—"The Portugals send yearly eight ships to the great empire of Prester John, which also furnishes them with many sailors."

In the original Correspondence of the India Office is a M.S. of three pages, dated May 21st, 1862. In the port of Agona

endorsed "An Armenian, his report of Prester John or the Ethopian Emperor,"[1]—of which the following is a summary:—"Report of an Armenian, who came from the court of the Prester John some twelve days since. Goods carried from Dialeque [? Diabeque, *modern* Diarbekir] to the King's court, called Dombia "(a very great city)," twenty-five days' journey by caravan, being all kinds of India clothing, English commodities, and velvets from China of all sorts, and their worth. Commodities which *his* country yieldeth, with their prices.' From Cairo to Dembia, fifty days travel by caravan. Account of the king's state. He sits on a gilt bedstead like those of China, and daily receives great troops of men, some days 2,000, and on Fridays their fast days, a far greater number. Thirty or forty great men sit near the king, at whose houses all complaints and suits are heard, and the king, on their report, administers justice. A great shame amongst them for any man to be drunk; the king's drink is made of honey, for they have not any wine in their country; when he eats all people depart, except his council, "the quantity of meat is little, some 15 or 20 dishes to the king's table." The women sit and converse with the men. The Turks only come near them for merchandising. The King has four wives for succession, but the commonalty hath but one, his religion is nearer the Greeks, than any other. He has not less than 300,000 fighting men; their arms are like the Turks; some 40,000 mules, the only beast they go to war with, for their long enduring and passing the mountains; they ordinarily make war with savage people who have not the knowledge of God. Great quantity of elephants, but they are not used for war, being killed for their teeth. The present king is called Susinnus. Dembia is situated on the Nile, which at that place is at least eight leagues across, and has at least eighty islands, small and great. Four or five days' journey from Dembia is a mountain called Phillassa, inhabited by Jews, so steep that they are wound up in baskets, and very high, the compass is ten days' journey; it is very fruitful, and inhabited with many people, who are tributary to Prester John, but often rebel. Zeila, two days journey without Bab-el-man-del, is twenty-five days journey to Dembia."

The Portuguese had been the means of spreading the renown of the African prince and concentrating the eyes of Europe upon him as the real Prester John; and his reputation as such continued during the earlier part of the XVII century. At

1 *Calendar of State Papers, Colonial Series, East Indies, China and Japan.* p. 237.

length the investigations of the learned were brought to bear on the question, and it was the publications of two Portuguese, Balthazar Tellez in his History of Ethiopia and the Letters of Alphonso Mendes, the Roman Catholic Patriarch of Ethiopia,[1] that first gave a serious check to the delusion.

The Missions to China of the Church of Rome had been recommenced towards the close of the preceding century, and attention began to be directed anew to the far east. Manuscript accounts of the mediæval travellers which had long lain concealed and forgotten were now brought to light, and it was seen that the narratives of Plan Carpin, Rubruquis, Marco Polo, Monte-Coserino, Friar Odoric and many others all pointed clearly to central Asia as the site of Prester John's kingdom. Many of these MS. in the the Latin, Italian, French and other European languages were now printed, thus making accessible to far greater numbers than before the numerous details that were on record regarding this subject. Gradually the works of oriental writers began to be translated and published, which work has continued down to the present time, so that now, besides the European accounts, we have reliable translations from the Arabic, Persian, Armenian, Syriac and Hebrew, all testifying to the fact of a mighty Christian potentate ruling in central Asia. So thoroughly was the belief in the African prince given up that we scarcely ever find his name mentioned in this connection later than the middle of the XVII century.

While the predominance of testimony pointed to the Kerait chief Ung-khan as the veritable royal priest, the discrepancies between the different writers still left the way open for speculation, What was the history of this great empire? Were there no vestiges of it still left?

In 1661, the two missionaries Albert Dorville and John Grüber returned from China to Europe, and by their report gave a new direction to the investigators. They stated that in passing through Tibet they had observed many traces of the empire of Prester John. In fact from all they had seen and heard, they came to the conclusion, that the Dalai Lama ruling in Tibet was no other than the legitimate but apostate continuator of the said potentate. The many remarkable resemblances they had noticed to the rites and practices of the Church of Rome; and, above all, the high pretensions of this royal pontiff, and the divine honours which were rendered by his subjects and accepted by him, all tended to confirm them in this belief.[2]

1 *Historia Tartarorum Ecclesiastica.* p. 18.
2 See Kircher's *China Illustrata* p. 51.

Although that view of the matter found its advocates in Europe, it was not very generally adopted ; and up to the present time, a mist still hangs over the memory of Prester John. Even among those to whom we naturally look for an authoritative statement, opinions are divided as to the historical or the mythical character of our hero ;—as to whether such an individual ever had a real existence—or whether the stories that have so long clustered round the name are but the productions of a fertile oriental imagination.

Quite recently the subject has been brought anew before the European public by Dr. Gustavus Oppert, Her Majesty's librarian at Windsor Castle. In a most learned and elaborate treatise, this scholar has set himself to prove that the line of Princes known by the name of Prester John, were no other than the descendants of the Leaou dynasty of China. When they were expelled from China by the Kins the ancestors of the present imperial family, they removed to the West, and established the powerful empire of Karakatai, where they reigned with great eclât for nearly a century, and eventually, like many other illustrious kingdoms, succumbed to the all-conquering power of Genghis Khan. The theory is plausible and is ably argued, but it has its weak points.

Since the publication of the last mentioned volume, Professor Bruun of Odessa has published a work in Russian, entitled "*The Migrations of Prester John*," in which he disputes the conclusions arrived at by Oppert, and proposes as the true man, the Georgian prince John Orbelian, the general in chief under several successive kings of Georgia.

Colonel Yule, who gives a notice of Professor Bruun's work in the Appendix to his new edition of Marco Polo, remarks :—"My own conviction is that the report of Otto of Freisingen is not merely the *first mention* of a great Asiatic potentate called Prester John, but that his statement is the whole and sole basis of good faith on which the story of such a potentate rested ; and I am quite as willing to believe, on due evidence, that the nucleus of fact to which his statement referred, and on which such a pile of long enduring fiction was erected, occurred in Armenia as that it occurred in Turan."

There are still difficulties in the way of accepting the Prince of Georgia, as there has been with every theory yet propounded ; and probably many will acquiesce in Colonel Yule's view that the Prester Johns who have been discovered by Frank travellers in the east, were but the natural supply to a persistent demand for such a personage.

I have thus endeavoured to follow the story of Prester John through six centuries or more, and must still leave it in the hands of the controversialists. Much has been done in overhauling the documents of byegone ages.

One other source of light however still remains to be developed. Chinese histories contain a mine of information as yet scarcely suspected or even touched upon, but I shall refrain from entering into the evidence to be gathered from this department.

BUDDHIST RELICS.

Surrounded as we are on every hand by the emblems of Buddhism, and living as we do among a people whose very language is tinctured by its phraseology, it is surely natural for those of us who are called to spend the greater part of our lives in this country, to seek some acquaintance with that ponderous system of faith that may truly be designated the national religion of China. While this indeed is incumbent on those whose profession leads them into more intimate converse with the people, and whose it is to speak with them on things spiritual and intellectual, it is scarcely exceeding the truth to say that some knowledge of the subject is advantageous to every resident in the empire. Even the casual visitor will feel an additional interest imported to his temporary sojourn, by having the key to unravel the myths and legends bound up in those hideous images and grotesque sculptures that line the gloomy halls of the Buddhist fanes and cloisters.

It is worthy of remark, that in the several nations of this hemisphere, where Buddhism has struck its deepest roots, the vital energy of the system seems to be on the wane, at the same time that an extraordinary spirit of investigation regarding its history and principles is occupying the attention of scholars throughout Europe. I have no intention of touching on the general question of Buddhism, of which a mere statement of the various phases, its leading principles and sub-divisions, would be sufficient to occupy a lecture. I propose merely to say a few things about relics connected with the system. Although relic worship is in fact extraneous to the pure doctrine, yet in some countries it has entered so largely into the life of the faithful, as to seem an essential part of the religion. This has been observed to some extent in every nation where the faith has been planted; but it is in India, the cradle of the religion, that the relic institution has been conducted on systematic principles and developed to an extent unparallelled in other countries.

Without entering into details of the life of the illustrious founder, I will merely recall to mind the fact that he was born about five centuries before the time of Christ, near the city of Kapila, in the kingdom of Oude in Northern India, the heir-apparent of the Royal house of Shakya. Of a meditative cast of mind, he early conceived a deep-seated dissatisfaction with the world and its institutions. Having struck out for himself a new conception of the universe, he abandoned the luxuries of the palace, for a life of austerity and penance,—gathering around him a devoted band of disciples, some of whom willingly gave up all to follow the fortunes of their beloved teacher.

Divesting the record of some of its mythical features, we learn that his death took place at a mature old age,—the immediate cause having been an attack of dysentery, brought on by a dinner of pork, to which he had been invited by a pious smith. The circumstances attending his death (or entrance into *Nirvana*), between the two *Sala*[1] trees, in a forest near Kushinagara, are dwelt upon at great length in the legends, and for the better understanding of subsequent events, it will be well to give the gist of these traditions.

We are told that after his body had been placed in the coffin with great pomp, by the magnates of Kushinagara, three several times he raised himself from his final resting-place. First, to address instructions to his favourite disciple and relative Ananda. A second time he sat up to impart words of consolation to his sorrowing mother. On a third occassion, he raised his feet and put them outside the coffin, to gratify his great disciple and successor Kasyapa.

On the completion of the funeral obsequies the pile ignited spontaneously and was soon in a blaze. The skin, flesh, muscles, intestines and liver were all consumed, leaving not a trace of ashes. All had disappeared except the *relics*. Chief among these were the four canine teeth, the two shoulder bones, and the frontal bone. These were in a state of perfect preservation, having received no damage from the fire. Besides these objects there was an accumulation of others of smaller size, sufficient to fill an eight bushel measure. The smallest were the size of a mustard seed, in form like the bud of a flower ; the next were the size of a grain of rice, and resembled pearls ; while the largest were the size of a pea, in appearance like gold. These relics were laid out with the highest honours for seven days, to give the people an opportunity of doing homage to them ; being guarded by four

1. "Shorea robusta."

concentric rings of elephants, horses, chariots and warriors respectively.

When the report of these events got spread abroad, a succession of demands were speedily sent in from the Princes and magnates of eight of the surrounding nations, all of whom laid claim to a portion of the relics. The magnates of Kusinagara demurred to their pretentions, and were about to resist the demand by force of arms; but a celebrated old hermit named Dauna interfered to quell the strife, by proposing an equable division among the eight claimants. The golden vessel in which they were deposited was opened to the gaze of all. Great was the clamour and loud the lamentation that took place at the sight of these mementos of their departed teacher; and in the midst of the prevailing confusion, the hermit Dauna managed adroitly to abstract one of the canine teeth, which he concealed in the folds of his robe. The theft however was noticed by one of the Shakya family, who succeeded in getting possession of the relic unobserved, and put it in a place of honour. When the partition among the eight claimants had been completed, Dauna discovered that he had been outwitted about the tooth, but fearing to make known the matter, he put up with his disappointment in silence. Anxious however to retain some token of remembrance, he applied for the vessel that had contained the relics, which was granted to him.

Very shortly after the occurrence of these events, some new candidates made their appearance in the persons of the Moriya princes from Pippalavana, who also came seeking a portion of the treasures. They were informed by the magnates of Kushinagara, that nothing now remained but the charcoal ashes from the funeral pile. These ashes they carefully collected, and carried home with them.

Omitting details regarding the wonders that attended the removal of these much-valued objects to their respective destinations, suffice it to say that ten chapels or pagodas were built for their honour and protection;—eight over so many portions of the bodily substance of Buddha, a similar one by Dauna over the golden vessel that had held the relics, and another by the Moriya princes over the cinders of the funeral pile. Of the four canine teeth, the upper right one is said to have been taken possession of by the gods of the thirty-three heavens. The lower right tooth was carried to the country of Gandara. The upper left was taken to the kingdom of Kalinga, on the border of the Bay of Bengal; and the lower left fell into the possession of the

dragons. The other teeth and hairs of the head were said to have been distributed by the spiritual powers through other worlds.

I find a Burmese tradition however that states, that shortly after the death of Buddha, a sage named Gambawatti brought thirty-three of the sacred teeth to Thaton in that country, where they were deposited in a pagoda.

Some twenty years after this, the Patriarch Kasyapa fearing for the safety of the relics thus distributed over so many countries concerted with the king of Magadha, to induce the others to give up their treasures. An exception was made in the case of one of the portions, which was retained at Rama, and at a subsequent date was conveyed to Ceylon. The relics thus obtained were placed in six golden boxes, and these were enclosed in a succession of costly cases, the whole being deposited in a brass chapel, which was sunk in the earth to a depth of 80 feet, outside the city of Rajagriha. A plate of gold was placed along with them, bearing the following inscription by Kasyapa:—"In after time, a young man named Piyadasi shall ascend the throne, and become a great and renowned monarch, under the designation of Asoka. Through him the relics shall be spread over the peninsula of Jambu-dripa." Every precaution was taken to secure the deposit, and a chapel was built over the spot; while the transaction was kept secret from all but a select few. As the few who were in the secret died off one by one, the knowledge of the treasure died with them; and the very existence of the relics almost ceased to be even known. Meanwhile Buddhism passed through a precarious and chequered history of some two centuries, till the time of the celebrated Asoka, king of all India, who became a convert, and distinguished himself by his zeal as a revivalist and propagator of the faith. In addition to his numerous bequests, he determined on building a great number of pagodas throughout the country, in honour of the relics of Buddha. It now became a question where these objects were to be found. By the king's order, search was made in every direction, but without success. Five of the original pagodas were demolished with the hope of of finding them, but in vain. Disappointed but still undaunted by his want of success, Asoka directed his steps towards Rajagriha, resolved not to abate his exertions, until he had found the object of his desires. Arrived at the capital, he called an assembly of the hierarchs and the people, to enquire if any one could give a clue to the discovery of the relics. In the crowd was a veteran devotee, a hundred and twenty years old, who declared that when a young priest, seven years of age, his superior

directed him to take flowers and incense, and leading him to a retired place, said:—"You see that dark bush, in the middle of which there is a small stone pagoda; let us prostrate and make our offering before it." The rite accomplished, he added with a solemn tone:—"Young Shaman, observe well this spot, and ever remember it, he said no more, and we returned home. "That exclaimed the king—"is doubtless the very spot I have been searching after and unable to discover." They hastened to the place indicated; and great offerings were made to propitiate the guardian spirit. The latter assuming the shape of a young man, removed all the obstacles that obstructed the way to the place. On nearing the object of their search, the door opened at the touch, and the king found the gold plate with the inscription concerning himself. Having removed nearly all the relics, he closed up the place as before. This event is dated in the year B.C. 325.

In tracing the history of the Buddhist relics, we arrive here at something like a starting point, and emerge from the region of fable. No name in the history of ancient India seems better authenticated than that of Asoka, both by Buddhist tradition and the numerous contemporary inscriptions still in existence through the country. The legend of eighty-four thousand[1] pagodas attributing their origin to this monarch, so extensively current through the Buddhist writings, is of course a mythical exaggeration; but there is little doubt that many of those structures, the remains of which still exist, date from his reign. A vast number of shrines were established through the country under his patronage; and in after years these became so many centres of attraction, to which the faithful of all nations were accustomed to perform long and wearisome pilgrimages. Not the least remarkable among these were the succession of devotees from China, some of whom have left behind them detailed accounts of their wanderings, which are now records of very great interest. There is a stern reality about these self-denying journies, which strikes the modern European mind with amazement almost amounting to incredulity. It were but sacrilege to place them in the same category with our pilgrims of the nineteenth century, who can satisfy their penitential convictions by a visit to some

1 The Buddhists say there are 84,000 pores in a man's body, and thus, by following corruption and passing through transmigration, he leaves behinds him 84,000 particles of miserable dust. Buddha's body has also 84,000 pores, but by resisting evil and reverting to truth he has perfected 84,000 relics; these are as hard and as bright as diamonds affording benefit to men and spirits wherever they are deposited.

renowned shrine *via* railway train, surrounded by all the appliances of the modern tourist. Even the knight-errantry of our thirteenth century crusades must pale before the adventures of some of these simple minded monks. Nor were they of the class who sought out self-imposed penances for the sake of suffering. They had no occasion nor had they the desire to fill their shoes with dried peas, lest they should forget the toils of their pilgrimage in the pleasures of the way They had an object in view, and unwearyingly did they pursue that object, undaunted by the trials and dangers that inevitably crossed their path

Passing over the narratives of Fa-heen, Sung-yun and others, with merely occasional references, I intend to confine myself chiefly to a notice of some of the sacred objects noticed by Heuen-chwang, a Buddhist monk of the VII century, who spent sixteen years in visiting the relics and collecting the scriptures of his religion. At the age of twenty-one, our hero was admitted into full orders in the Buddhist priesthood, having already attained renown by his profound studies and ample knowledge. Oppressed by theological doubts, he resolved to perform a journey to India the birth place of the faith and the abode of its most celebrated doctors, to obtain that information which he sought in vain in his native land. In company with some other priests he asked the imperial permission to travel, but was denied. His companions lost heart, but he had a fixed purpose, and was not to be foiled. We see in Heuen-chwang the characteristics of a self-made man. The officers at the boundary had orders to stop him, spies were set to dog his steps. By his address and determination he managed to elude all their opposition. But once outside the wall, he was entirely deserted by his friends, and found himself alone in an unknown country. With nothing to support him but his strong faith in the spiritual, he knelt down and sought for strength in fervent prayer. He got a guide as far as the desert, but there he left him to pursue his solitary journey over the sandy waste, guided only by the skeletons of his predecessors who had perished on the way. Opposed at every military post he reached, he had almost begun to despond, and to quote the words of Max Müller. "He had nothing to refresh himself except his prayers—and what were they? Texts from a work which taught that there was no God, no Creator, no creation,—nothing but mind, minding itself. It is incredible in how exhausted an atmosphere the Divine spark within us will glimmer on, and even warm the dark chambers of the human heart." One is tempted to linger over the adventures

of this remarkable man, but I find it is leading me too far away from the immediate subject of this lecture, and will therefore proceed to recount some of the notices he has left of his visit to the sacred places.

As implied in my preceding remarks, it was the desire of Asoka, to disseminate the relics of Buddha far and wide over his vast dominions, and for the preservation of these he caused an incredible number of pagodas to be erected. Whatever these relics may have been, we know from the concurrent testimony of several witnesses, that for centuries they had at least a traditional existence.

Making his way across Chinese Tartary, and over the snowy mountains, passing *en route* Tashkand and Samarkand, the traveller appears to have reached Balkh in the spring of 630. At this, the ancient capital of Bactria, he meets for the first time on his journey, with one of the sacred deposits. He says:—"There is a pagoda two hundred feet high, covered with a composition dazzling like a diamond, and decorated with a profusion of precious stones. This contains some of the RELICS, which constantly give out a divine lustre." From this place he proceeded south, and crossing over the Hindu-kush range of mountains, arrived at the city of Kapissa, about twenty-seven miles north of Cabul. Some thirty *le* to the south-east, he says:—"There is a pagoda about a hundred feet high. On the occurrence of a fast day, it always emits a brilliant light. At the top of the cupola, a black fragrant oil is seen to exude from the interstices of the stonework, and in the dead of night, harmonious music is heard."

And so he goes on from station to station making the grand tour of India. I have noted twenty five places altogether, where he found RELICS of the body of Buddha. Several of these had legends connected with them, and many of them were famed for their sanitary influence. In Gandhara was a pagoda built by king Kanishka, which contained a bushel of the RELICS, renowned for the cure of infantile complaints. Those who came seeking benefits, rubbed the building with perfumes and scattered flowers about, when they frequently had their desires gratified. Near Mungali, he finds a pagoda with a marvellous story of king Uttarasena having obtained a portion of the RELICS on their original distribution, having brought them home on an elephant, and deposited them in this pagoda. In Cashmere were four pagodas, each containing a pint of the RELICS. At Tse-ka the ancient capital of the Punjab, was a pagoda with many RELICS,

which shone with a dazzling light on fast days. A Chinapati he speaks of a line of RELIC pagodas seven miles in length, and so near to each other, that the shadow of one impinged on the next. At Stavesvara there was a pagoda containing a pint of the RELICS which constantly emitted a brilliant light, and many wonders were effected by them. At Kanoj the ancient Hindu capital of North India, were RELICS, which always shed a brilliant light. Kapilavastu was a pagoda with RELICS, and ten miles further south, another. At Rama, there were a bushel of RELICS guarded by dragons. Miracles were wrought by them, and sometimes they emitted a supernatural light. At Kushinagara, RELICS were still found by the faithful. Near Ghazipur was a pagoda containing a pint of RELICS, A hundred *le* farther was a pagoda said to have been originally built by old Dauna who, it will be remembered, at the distribution of the RELICS, first stole the tooth and then begged the measure.

At a less distance to the north-west of the same city, he speaks of a pagoda of gilt copper a hundred feet high, and gives the following as the popular report :—"This building contains about a pint of the RELICS of Buddha. On the fifteenth of every month, they emit during the night a pale disc of light, which illumines the cupola. This light shines till morning, when it fades by degrees, and retires into the pagoda."

He had taken the precaution, however, to smear the inside of the measure with honey so that by this means he obtained also a portion of the relics that had adhered to it. So says the tradition, and adds also, that sometimes on fast days these emit a dazzling light. At Vaisali there was once a bushel of RELICS, being one of the original eight divisions. Subsequently nine tenths of these were removed by Asoka. At Magadha he found a pagoda, built by king Asoka, containing a pint of RELICS. To the westward of the royal city were five more pagodas by the same royal founder, containing each a pint of RELICS by virtue of which some signal miracles were performed. At the convent of Silabhadra, were some RELICS deposited in a mountain peak. At Bodhagaza were some pagodas that contained RELICS of Buddha's bones, about the size of finger joints, and of the flesh like large reddish-blue pearls. Sometimes they shed a brilliant light, and sometimes distributed flowers. Every year at the time of Buddha's nativity they were exhibited to the public. Heuen-chwang being there at the time went to see them, afterwards when he was giving vent to some sceptical views, he was convinced and converted by a miracle. At Rajagriha he notes

the place where the original bushel of RELICS were deposited and afterwards removed by Asoka. Near Konkana was a pagoda with RELICS, which sometimes shed a celestial light on fast days. Near Petasila was a pagoda with RELICS, which constantly emitted a bright light.

Early in November of the same year, we find the pilgrim at the city of Gandhara, gathering up the traditions of the place. Three miles south-east from the city stood a Pippala tree, under which Buddha is said to have delivered the following prophecy to his disciple Ananda :—"Within four hundred years after my decease, there will be a king who shall achieve renown under the name of Kanishka. At a short distance to the south of this he will build a pagoda, in which will be placed the greater part of the RELICS of my flesh and bones." Now he continues—to the south of the Pippala tree, there is actually a pagoda that was built by Kanishka.

In the four hundredth year after the death of Buddha, Kanishka ascended the throne, and extended his rule over the whole Indian peninsula. He neither believed in the reward of virtue nor the punishment of crime. He despised and calumniated the religion of Buddha. One day while hunting in the meadows, he saw a white hare. The king pursued it till he reached this spot, when the hare vanished. He then observed a young herdsman in the middle of the wood, building a little pagoda three feet high. The king asked him what he was busy with. 'Formerly'—answered the young man,—'Buddha by his Divine prescience uttered this prediction ;—In this fortunate country there will be a king who will build a pagoda, that shall contain the greater part of the RELICS of my body.—In your past existence, Oh great king, your sacred virtue acquired for you the right to the throne. The divine merits and higher felicity named in the ancient prediction, coincide exactly with the present hour That is the reason I am now here, to make the matter known to you to-day —When he had finished speaking he disappeared. On hearing these words the king was transported with joy. Congratulating himself on having been named in the ancient prediction of the great Saint, he opened his heart to the faith, and shewed a proper respect for the religion of Buddha. Round the spot where stood the little pagoda, he raised a stone pagoda, using every effort to make it exceed the former in height. But as the new erection rose, the little pagoda always kept three feet ahead of it. He continued to build till it was more than four hundred feet high. The base

was half-a-mile in circumference, When he had completed five storeys, each a hundred and fifty feet high, he succeeded in covering the little pagoda. The king congratulating himself on his success, placed a twenty-five tier cupola on the top. He then deposited a gallon of the RELICS of Buddha inside the building, and worshipped them. When the structure was finished, he saw the little pagoda spring up from the south-east angle and overtop it by one half. Troubled in mind, the king ordered the demolition of this pagoda; but soon after, when it was below the second storey, he gave orders to desist, and through the opening in the stonework he saw the little pagoda rise a second time from its original place. The king retired with a sigh, saying:—'Alas! in human undertakings one is easily deceived, but it is impossible to frustrate the work of the gods; when an object is under divine protection, what can rage and anger accomplish?' Filled with shame and fear, he withdrew.

In the spring of 631 we find the traveller at Mungali to the north of his former position. There he makes the following note:—'At sixty or seventy *le* south west of the city, to the east of the river Swat, is a pagoda about sixty feet high, which was built by the king Uttarasena. Formerly when the Tathâgata was about to enter the Nirvana, he addressed the multitude, saying:—'After my decease, Uttarasena the king of Udyana must obtain a portion of my RELICS.' When the kings were on the point of making an equal division, king Uttarasena arrived after the others, and this delay was forthwith attributed to a feeling of contempt and disdain. The gods then declared afresh the last words of the Tathâgata; upon which he obtained his portion of the RELICS. He returned with them to his kingdom, where he built a pagoda in their honour. By the side of this, on the bank of the river, there is an enormous stone of the form of an elephant. Formerly when Uttarasena returned to his kingdom, he transported the RELICS on a white elephant. Arrived at his place, immediately the elephant fell down dead, and changed into stone. The king then caused the pagoda to be erected by the side of it.

Going southward he passed the Indus, where he takes occasion to mention the danger of crossing the river for any one who carries precious stones, the seed of flowers and rare plants, or any of the RELICS of Buddha, the result in such cases being that the boat is engulphed in the waves.

The pilgrim halted for two years in the kingdom of Cashmere, where he tells us:—"There are four pagodas built by the king Asoka, containing each a pint of the RELICS of Buddha."

In November 633 he was at Tse-ka the ancient capital of the Punjab, where he remarks:—"At about three miles north east of the new capital, there is a pagoda two hundred feet high, which was built by Asoka. It was there that the Tathâgata stopped halfway, on his journey to the north when he went to convert the people. It is stated in the History of India, that there are many RELICS in this pagoda; and on fast days, they always emit a dazzling light."

Eighty-three miles farther east, at the city of China pati he remained for fourteen months. To the south east of this city he tells us there is a line of pagodas containing RELICS of Buddha, seven miles in length, completely encircling a hill, and may be numbered by hundreds and thousands, their shadows meeting each other.

In October 635, the pilgrim was at Stanesvara, one of the sacred places in Central India of great repute. There he says:—"At four or five *le* north-west of the city, there is a pagoda two hundred feet high, which was built by the king Asoka. The bricks are of a yellowish red, extremely bright and lustrous. In the interior of this pagoda, there is a pint of the RELICS of Buddha. They constantly give forth a brilliant light, and numerous prodigies are wrought by their virtue."

In the autumn of 636 he spent three months at Kanoj, the ancient Hindu capital of North India, where he says—"there is a pagoda that was built by the king Asoka. Although its base is sunk in the ground, it is still a hundred feet in height. Formerly Buddha preached in this place for seven days. In the interior of the monument there are RELICS, which constantly shed a brilliant light."

Towards the end of December he reached the ruined city of Kapila, renowned as the birth place of Buddha. Fifty *le* south from that was an ancient city, formed as the birth place of a sage of Buddha. There he notes,—"On the south-east of this city is a pagoda, which contains RELICS of Buddha." More than thirty *le* north-east from the latter he says,—"There is a pagoda which contains RELICS of Buddha."

A few days later Heuen-chwang was at the ruined station of Rama, where he makes the following notes:—"To the south-east of the ancient capital there is a brick pagoda rather less than a hundred feet high. Formerly after the decease of Buddha, the king of this country having obtained his share of the RELICS, brought them to his kingdom, and raised this pagoda to

their honour. Miracles are exhibited there from time to time and occasionally they emit a supernatural light."

The Buddhist chronicles of Ceylon and Siam however relate that the original pagoda was washed away by the encroachments of the Ganges, when the relic casket containing one of the original eight divisions of Buddha's remains was carried down to the sea. There it was picked up by some members of a race of dragons, and conveyed to their own country called Majerika. Eventually it seems to have reached Ceylon, not later than the fourth century. The probability is that the casket was by some means conveyed to Ceylon at an early date, and the story of the dragons invented to conceal the facts.

In the beginning of January 637, the traveller was at Kushinagara, the scene of Buddha's death, a place rife with legends of that memorable event. Many of these he collected, and has left ample memoranda regarding the noteworthy objects. North of the city he says there is a pagoda built on the spot where Buddha's body was burnt, and remarks that RELICS are sometimes found there yet by the faithful. He mentions a pagoda erected by Asoka, near the place where Buddha exhibited his feet to Kasyapa, and adds :—"It was in this place that the eight kings obtained their portions of the RELICS. A stone column ha been set up, bearing an inscription commemorative of the event." He then relates the story of the eight claimants for the RELICS, the refusal and subsequent assent to a division by the princes of Kushinagara, the after claim of the gods and also of the dragons and the equable adjustment finally, to the satisfaction of all parties.

Fifty miles to the east of Benares, he visited Ghazipur, a city on the Ganges, to the north-west of which he says there is a convent, with a pagoda built by king Asoka. In the historical records of India, it is said :—"In this pagoda there is a pint of the RELICS of Buddha."

Proceeding southwards for a hundred *le*, he came to a pagoda sunk in the ground, and rising some tens of feet above the surface. After the decease of Buddha, when his RELICS were divided among the eight kings, the Brahman who measured them put a coating of honey on the inside of the measure. The distribution being completed, the Brahman obtained possession of the measure to the inside of which a portion of the RELICS had adhered. For these he built a pagoda, and deposited the measure and RELICS inside. In after times, Asoka opened the pagoda, took out the measure and its treasures and

built a new and lofty edifice for them. Occasionally on days of worship these emit a dazzling light.

His next stage takes him to Vaisali a famous city to the north of Patna, where he says,—"there is a pagoda, built by a king of Vaisali. After the decease of Buddha, the king of this country obtained his portion of the RELICS, and raised this edifice in their honour." In the historical records of India we read:—"This formerly contained a bushel of the RELICS of Buddha, but king Asoka opened it and took out nine-tenths, leaving only one tenth remaining. Subsequent to that another king desired to open the building and take out the RELICS; but just as he was about to commence operations, an earthquake took place, which caused him to desist."

Shortly after that, Heuen-chwang was in the kingdom of Magadha, the scene of some of the most eventful periods in the life of Buddha. There, he says:—"there is a pagoda, buried in the ground, the only part above the surface being the cupola, which is covered with rich ornaments, and surrounded by a stone balustrade." This was one of the eighty-four thousand pagodas. King Asoka had it built by human hands inside his palace. It contained a pint of the RELICS of Buddha. Miracles without end are performed there, and it constantly emits a divine light. After the destruction of the prison, Asoka met the great Sage Upagupta, who cleverly managed to draw the king towards him, and effected his conversion. The king said to the sage:—'Thanks to my good works in a past life, it has been my fortune to be placed on the throne. But my sins and imperfections have prevented me seeing Buddha in the flesh, and profiting by his instructions. Now that Buddha has left the sacred remains of his body in the world, I wish to build some other pagodas for them. 'Great king'—replied the Sage—'it is my most ardent desire to see you, by the force of your virtue, commanding the host of spirits, and solemnly charging them to protect the *Three precious ones*. Now the time has come.' He then explained to the king in detail, the motives which should guide him in making an offering of his kingdom to Buddha, and spoke of Buddha's prediction regarding the merit he should obtain by his pious edifices. When he had heard these words the king leaped with joy. He called the spirits and demons, whom he thus addressed:—'Buddha has guided intelligent beings for their own interest, and has procured their happiness. Thanks to the good deeds of a former existence, I have procured honour above other men. Buddha having left his venerable remains, I wish to raise new edifices to their honour.

Do you, Oh! demons and spirits, combine your wills and your efforts, so that to the utmost extremities of India, in every town possessing the value of a hundred thousand pieces of gold, a pagoda may be raised to receive the RELICS of Buddha. The idea will be mine, but the merit of execution will be altogether yours. I do not wish to monopolize the whole merit of this pious undertaking. Each one of you must construct one of these monuments, and then return to receive my further orders. Having received these orders, the spirits and demons set to work in the places indicated When their work was completed, they came in a body to ask the king's commands. Asoka having opened the pagodas that had been built by the eight kings, divided the RELICS and entrusted them to the demons and spirits. He then said to Upagupta:—'In all the places that I have in view, I wish to have the RELICS deposited at the same instant; although this is the prayer of my heart, the desire is not yet accomplished.' 'Call the demons and spirits' said the sage,—'and tell them that on a certain day, when the sun shall be darkened, and present the appearance of a hand they must all at that instant deposit the RELICS. Having received these instructions, the king delivered his orders to the spirits and demons. When the time arrived, the king observed the sun's disc. Exactly at midday, the sage by his supernatural power extended his hand and concealed the sun. In all places where the pagodas had been erected, the inhabitants were witnesses of this phenomenon. Thus in the same instant of time this work of merit was universally accomplished.

Having spent nearly two years in this neighbourhood, visiting and studying the sacred spots, the pilgrim had ample time to make memoranda and gather up the local traditions. Westward of the king's palace, he says:—"there are five pagodas, the bases of which are buried in the ground, but a portion of them is still above the surface. Looked at from a distance they resemble hillocks, each side several hundred paces in extent. In later times small pagodas have been built on the top of them. In the historical records of India we read:—'When king Asoka had completed the eighty-four thousand pagodas, he had still five pints of the RELICS of Buddha over; and for these he built five pagodas, the beautiful construction of which eclipsed all the others, and by the virtue of which some extraordinary miracles were performed. Thus he sought to honour the person of Buddha five fold in substance. At first, faithless people said that king Nanda had constructed these five depots to guard his treasury of precious objects. Subsequently there was a king of a sceptic turn, relying

upon these conjectures of the past, and urged on by a blind cupidity, assembled his troops and came in person to make excavations. But suddenly the earth began to quake, the mountain gave way, dark clouds covered the sun, and a terrible noise resembling the roar of thunder issued from the pagodas. The officers and soldiers fell to the ground, the elephants and horses fled with affright; the king acknowledged himself vanquished and relinquished his plundering project. Many persons say that this story is void of truth; but we admit our full confidence in these ancient records, and believe them to be perfectly true.'

About thirty-seven miles to the south-west of the royal city, he came to the monastery of Silabhadra on an isolated hill, named after a celebrated sage, who had deposited some RELICS of Buddha in a mountain peak, which resembled a pagoda at a distance.

At Bodha-gaya, some twenty miles or more farther south, outside the north gate he saw a convent and pagodas which had been built by the first king of Ceylon. He remarks:—"The pagodas are of gigantic proportions and richly decorated. They contain RELICS of Buddha. Those from his bones are about the size of finger joints, lustrous, pure white and transparent. Those from his flesh are like large pearls, of a reddish blue tint. Every year at the full moon of the month in which Buddha performed his divine miracles, these RELICS are taken from the pagodas and exhibited to the multitude. Sometimes they emit a brilliant light; sometimes they shed a profusion of flowers."

Our pilgrim being there just at the time of exhibition, went in company with Jaysena, a sage with whom he had formed an intimacy, to see these far-famed RELICS. The display having terminated and the treasure being replaced in the pagoda, Heuenchwang sat conversing with Jayasena late into the night. The latter remarked:—"Of all the RELICS that I have seen elsewhere, I have never seen any larger than grains of rice; how comes it that those we have just been looking at, so much exceed the ordinary size? Venerable sir, have you any doubts on the subject?" "The surprise and the doubts expressed by you," said Heuenchwang—"had already occurred to my mind." Shortly after this conversation, the RELICS suddenly disappeared, and the lamps both inside and outside the building shed an extraordinary light. Struck with astonishment, they went outside, and standing at some distance, they saw the RELIC pagoda dazzling with light, while a great flame rose from the summit and reached to the skies. Heaven and earth were light as midday. Neither moon nor star

were visible, and the precincts of the convent were filled with a sweetly perfumed atmosphere. The report of this wonder spread immediately, and brought together an immense multitude who worshipped and extolled the miracle ; but after a few minutes the brilliant light gradually diminished, and when about to go out, it circulated several times round the vessel with the RELICS. Immediately after, all was darkness and the stars shone out again. After witnessing this scene, all doubts were dispelled.

Turning northward again, the traveller is soon after at Kusâgârapura, the ancient Rajagriha, and former capital of the country. There he notes :—"To the east of the Bamboo Forest of Karandavenswana, there is a pagoda which was built by the king Ajatasatru."

After the decease of Buddha, when the kings divided his RELICS, king Ajatasatru returned with the portion he had obtained, built a pagoda to their honour, and worshipped them. The king Asoka, moved by a sincere faith, opened the monument, took the RELICS, and in turn built another pagoda. The remains of this still exist, and constantly spread a brilliant light."

A year and-a-half after leaving Magadha, we find him at Konkana, also known as Anagundi, the ancient capital of Dravida in Southern India. There he says :—"At a little distance to the east of the city, there is a pagoda, the greater part sunk in the earth, and about thirty feet high above ground. In the ancient historical records it is said,—'This pagoda contains RELICS of Buddha. Somtimes on the days of worship, it spreads a celestial light."

In the autumn of 641 he had reached Pitasila, a city represented by the modern Haidarabad on the Indus, where he notes :—"At fifteen *le* north of the city, in a large forest, there is a pagoda several hundred feet high, which was built by Asoka. It contains RELICS, which constantly emit a brilliant light."

Among the 84,000 pagodas constructed by order of Asoka, it is said that 19 found their way to China, in the shape of miniature receptacles, mere models of the loftier edifices. These are mentioned on various occasions in the national histories, together with the honours they received by different sovereigns. A notable instance is that of Woo Tsih-teen, the empress who usurped the throne in the 7th century. In her zeal for the Buddhist cause, she had made all preparations for paying a visit in state to a celebrated RELIC shrine ; and it was only at the last moment, that she was dissuaded from her purpose, by the importunate solicitation of Teĭh Jin-keê, one of her influential ministers, who casting himself on the ground before her, implored her as she

cared for the national welfare to desst. I find it stated in the local topography, that there is a pagoda inside the *Pwan* Gate at Soochow, which at first contained some RELICS of Budda. But the best known example is at the temple of Yuh-wang, within a day's journey of Ningpo, *Yuh-wang* being the Chinese for "king Asoka." The celebrated RELIC enshrined there, is reputed to have a known history of great antiquity. As the legend goes it was rediscovered in the year AD. 281, and according to the history of the province the pagoda was built at the commencement of the 5th century. It is still an object of worship to numerous devotees from far and near; and not a few Europeans have had the curiosity to look into the venerated casket.

The Rev. Mr. Milne, who visited the place in 1853, says :— "With a show of ceremony I was invited to peer through an orifice in the reliquary. I did so, but saw nothing save what looked like a glass bead; however, it did not deign to shine at me, and the aperture was soon closed."

I may here refer to the similar testimony of the intelligent traveller Robert Fortune in his work, "Residence among the Chinese" p. 34.

When Heuen-chwang returned to his native land after an absence of sixteen years, among the large accumulation of treasures he brought with him, were 657 Buddhist classical works in the original Sanscrit language, six images of Buddha in wood, silver and gold; but the chief and most honoured package was 150 grains of the RELICS of Buddha s body.

162 years after this an event occurred in connexion with this subject, which had a very important influence on the life and fortunes of one of the most renowned of China's scholars and statesmen, Han Wan-kung. Chang-gan in Shen-se was then the capital of the empire, and in the neighbouring prefecture of Fung-tseang, there was a pagoda in which one of the FINGER BONES of Buddha was preserved in a case. The case was to be opened once in 30 years, and the opening of it was sure to be followed by abundance and prosperity. The year 819 happened to be the time for exposing this bone; and the emperor, anxious to have as much benefit from it as possible, ordered it to be escorted to the capital, when it was brought to the palace in great state. It was kept in the private apartments for three days and then returned to the monastery. All classes, with one accord, princes, nobles, scholars and common people hastened to offer their gifts, each seeming only afraid lest he should be the last. Han Wan-kung then held the office of Censor in the capital, and

his indignation was uncontrollable. He undertook single-handed to oppose the surging tide of fanaticism, and addressed a remonstrance to the throne which procured his degradation, and he narrowly escaped capital punishment in consequence; but his memorial is immortalized, as one of the most remarkable pieces of this distinguished scholar; remarkable alike for its literary merits, and his outspoken denunciation of the imperial conduct.

Among the personal RELICS of Buddha that have been specially particularized, none hold a more distinguished position than the TEETH; and not a few places lay claim to the possession of one or more of these antiques. The first of those that Heuen-chwang had the fortune to see was at the city of Balkh, where he simply notes:—"A TOOTH of Buddha is exhibited there, about an inch long, and eight or nine tenths of an inch broad. It is of a yellowish white tint, and of a brilliant and pure substance."

Some few days farther south, having reached the Bamian territory, he speaks of a convent in a marshy valley, where a TOOTH of Buddha was preserved, five inches long and at least four inches broad.

After crossing the Hindu-kush mountains, to the north-west of the ancient city of Kapissa, on the southern bank of the Cabul river, he visited a convent dedicated to an ancient king, in which he saw one of the MILK-TEETH of Buddha, about an inch in length.

Fifty miles of a difficult road from Kabul brought the traveller to the ancient city of Nagarahara, the site of which has been recently identified near Jellallabad, where he says the foundation still remained of a pagoda that had formerly contained one of Buddha's TEETH; but it was no longer there at the time of his visit. When Fa-heen visited this place early in the 5th century, the TOOTH was still there. May we infer that this was the lower right canine TOOTH which, it will be remembered, was carried off to the kingdom of Gandhara on the original division of the relics? If so, it is just possible that it may have been the same object that Heuen-chwang found worshipped in Cashmere. For many past generations there had been an unquenchable strife between the Buddhists and the Kritiya rulers in Cashmere, and at the time of Heuen-chwang's visit, one of the latter named Chandrapida was on the throne. The following is the traveller's account of a TOOTH relic there:—"About ten *le* south-east of the new city, to the north of the ancient capital, and south of a great mountain, there is a convent containing about three hundred monks. In this convent there is a pagoda,

in which is preserved a TOOTH of Buddha, an inch and half long, of a yellowish white colour. Sometimes on a day of worship, it emits a brilliant light. Formerly when the Krityas had suppressed the Buddhist religion, the monks dispersed, each one settling where he found it convenient. One of them travelled all over India, visiting and worshipping the relics of Buddha, thus testifying the sincerity of his faith. At length learning that toleration had been established in his native country, he set out to return."

Soon after Heuen-chwang's departure from Cashmere, Hartha Varddhana the powerful king of Kanoj demanded the sacred TOOTH, at the head of an army on the frontier of the kingdom, which was granted to him, with small scruple as we may imagine, by Durlabha Raja, who being himself a Brahminist, had no faith in the Buddhist sacred objects.

Three years after leaving Cashmere, the traveller was at Kanoj, and there again we have some further account of this famous treasure, which he speaks of thus:—"In a casket kept in a sacred edifice there is a TOOTH of Buddha, an inch and-a-half long, it has a marvellous lustre, and an extraordinary colour that changes from morning to evening. People flock from all quarters, magistrates and commoners all unite in rendering homage. Every day the multitudes are numbered by hundreds and thousands. The guardians, in view of the noise and confusion that were increasing from day to day, have fixed a heavy tax, and have made it generally known, that whoever wishes to see the TOOTH of Buddha, must pay a large piece of gold. The devotees who come to see and adore, however, are still as numerous, and cheerfully pay the tax of the piece of gold."

Fa-hien, who crossed the Tsung-ling mountains in the 5th century, halted at a place called Karchu, to the south of Pamir, and remarks "there is also one of Buddha's TEETH, over which the inhabitants have raised a tower."

In the summer of the year 639, when Heuen-chwang was in Orissa, he must have heard of the famous TOOTH relic at Ceylon; for he remarks that looking southward in that direction, on a clear night, at a distance of twenty thousand *le*, a precious stone in the pagoda where the TOOTH was preserved, was seen shining with extraordinary lustre. Some curious particulars are known with respect to this TOOTH. I have already stated the tradition that on the division of the personal relics, after the cremation of Buddha's body, the upper left canine TOOTH was taken to the kingdom of Kalinga. A collateral testimony to this fact is the

existence of the ancient city of Dantapara (lit. Toot city) spoken of in the Buddhist chronicles, as the capital of Kalinga. General Cunningham thinks the site of this may be identified with the present town of of Coringa on the Godaveri river. There the TOOTH is said to have been preserved for 800 years, including an interval in which it was captured and carried off by the Brahmins to Palibothra, the ancient capital of India, on the site of the modern Patna. Its resistance to all their efforts to destroy it had the effect of converting the king Pandu, Lord paramount of India, who sent it back to Kalinga. The king of Kalinga, during the reign of the Singalese monarch Maha Sen (AD 261—274), being on the point of engaging in a doubtful conflict, directed in the event of defeat that the sacred relic should be conveyed to Ceylon. The sequel was that it was carried to that island in the beginning of 4th century, by a princess of Kalinga, who concealed it in the folds of her hair. The ancient Singalese chronicle, the Mahawanso, describes the procession as conducted by the king and by the assembled priests, in which the TOOTH was borne along the streets of the capital city Anarajapura amidst the veneration of the multitude.

Just about a century after this the Chinese pilgrim Fa-heen visited, Ceylon, and the following account which he gives of the TOOTH is interesting as being that of an eye witness—"Within the capital is erected the chapel of the TOOTH of Buddha, in the construction of which all the seven precious substances have been employed. The King purifies himself according to the strictest Brahmanical rules, whilst those men within the city who reverence (this relic) from a principle of belief, also compose their passions according to strict rule. This kingdom from the time when this chapel was erected has suffered neither from want, famine, calamity, or revolution.....They always bring out the TOOTH of Buddha in the middle of the third month, Ten days before hand, the King magnificently caparisons a great elephant, and commissions a man of eloquence and ability to clothe himself in royal apparel and, riding on the elephant, to sound a drum and proclaim as follows:—"Bôdhisatwa, during three *as-ankya* kalpas, underwent every kind of austerity, he spared himself no personal sufferings, he left his country, wife and child; moreover, he tore out his eyes to bestow them on another, he mangled his flesh to deliver a dove (from the hawk), he sacrificed his head in alms, he gave his body to a famishing tiger, he grudged not his marrow or brain. Thus he endured every sort of agony, for the sake of all flesh. Moreover, when he became perfect Buddha, he lived in the world forty-nine years preaching the Law, and teaching and

converting men, He gave rest to the wretched—he saved the lost. Having passed through countless births, he then entered Nirvâna. Since that event is 1497 years. The eyes of the world were then put out, and all flesh deeply grieved. After ten days the TOOTH of this same Buddha will be brought forth and taken to the Abhayagiri Vihâra. Let all ecclesiastics and laymen within the Kingdom, who wish to lay up a store of merit, prepare and level the roads, adorn the streets and highways, let them scatter every kind of flower, and offer incense in religious reverence to the Relic." This proclamation being finished, the King next causes to be placed on both sides of the road, representations of the 500 bodily forms which Bodhisatwa assumed, during his successive births. For instance, his birth as Su-jin-no ; his appearance as a bright flash of light ; his birth as the king of the elephants, and as an antelope. These figures are all beautifully painted in divers colours, and have a very life-like appearance. At length the TOOTH of Buddha is brought forth and conducted along the principal road. As they proceed on the way, religious offerings are made to it. When they arrive at the Abhayagiri Vihâra, they place it in the Hall of Buddha, where the clergy and laity all assemble in vast crowds and burn incense and light lamps, and perform every kind of religious ceremony, both night and day, without ceasing. After ninety complete days, they again return it to the Vihâra within the city. This chapel is thrown open on the chief holidays for the purpose of religious worship, as the Law (of Buddha) directs."

More than two centuries after this, we have the account of Heuen-chwang ; but as he did not visit Ceylon himself, he merely relates the sayings that he found current in India, thus :—"By the side of the king's palace, is the chapel of the TOOTH of Buddha, several hundred feet high ; it exhibits the lustre of some extraordinary jewels, and is ornamented with the most precious substances. An arrow has been placed on the spire of the chapel, surmounted by a stone of great value, called a ruby. This precious stone constantly sheds a dazzling light. Day and night, looking at it from a distance it is taken for a luminous star. The king bathes the TOOTH of Buddha three times a day. Sometimes he sprinkles it with scented water, sometimes he burns odorous powders to it. It is his aim to use the rarest and most precious articles, and respectfully pay his adoration to it. In the 11th century king Anaranhta of Burmah, sent a mission to Ceylon to endeavour to procure it, but he could obtain only a miraculous emanation of the relic. On the establishment of Kandy, towards

the end of the 13th century the sacred TOOTH was removed to it.

In the beginning of the 14th century, the Malabars came from the coast of Coromandel to attack Ceylon, and sacked Yapahoo which was then the capital. They seized the country, persecuted the faith, and carried off the sacred TOOTH to the south of India. After a few years the King of Ceylon, Prakrama 3rd, went in person to Madura to negotiate its surrender, and brought it back to Pollanarrua. During the troublous times which followed, the TOOTH was hidden in different parts of the island, at Kandy, at Delgamoa in Saffragam, and at Kotmalie; but at last in 1560 it was discovered by the Portuguese, and taken to Goa by Don Constantine de Braganza. It was mounted in gold, and had been deposited for security in one of the pagodas. On the intelligence of its capture reaching the King of Pegu, who had been in the habit of sending annual embassies to offer homage at its shrine, he immediately dispatched an embassy to Goa, to tender as a ransom three or even four hundred thousand cruzadoes, with offers of his alliance and services in many capacities, and an engagement to provision the Portuguese fort at Malacca as often as it should be required of him. The fidalgos and commanders were unanimous in their wish, to accept the offer as a means of replenishing the exhausted treasury of India. But the Archbishop, Don Gaspar, was of a different mind. He firmly resisted the offer, as an encouragement to idolatry, and was supported in his opposition by the inquisitors and clergy. The Viceroy, in consequence, rejected the proposal of the infidel King; and in full assembly commanded the treasurer to bring forth the TOOTH, which he then transferred to the Archbishop. The latter in the presence of all, with his own hands, put the TOOTH into a metal mortar, and having broken it into pieces, cast the fragments into a chafingdish, which he then caused to be thrown, ashes, coals and all, into the middle of the river, in the presence of all the people, who looked on from their windows and verandahs.

But a very few years elapsed before the delusion was revived, and not only a duplicate, but a triplicate of the desecrated relic, were regarded with undiminished adoration both in Pegu and Ceylon. The King of Pegu, in 1566, having been told by the astrologers that he was to wed a Singhalese princess, sent to demand her in marriage; but the reigning Sovereign, Don Juan Dharma Pala, having unfortunately no child, the prophecy was on the

point of discomfiture, when his chamberlain, a nobleman of the blood royal, suggested the substitution of his own daughter, and added impiety to fraud, by feigning to the Peguan envoys that he still held the genuine TOOTH relic, falsely supposed to have been destroyed by the Christians at Goa. The device was successful, the supposititious princess was received in Pegu with all the nuptial honours of royalty, and am bassadors were despatched to Ceylon, to obtain possession of the sacred TOOTH, which was forthwith transferred to Arracan.

The King of Kandy, Wikrama Bahu, on learning the deception which had been perpetrated by his cousin of Cotta, apprised the Peguan sovereign of the imposture which had been practiced upon him; and to redress it he offered him his own daughter in marriage, and proposed as her dowry to send the veritable TOOTH, affirming that both the one recently obtained from Colombo, and the other formerly pulverized at Goa, were counterfeit, his alone being the genuine relic of Buddha. But the prince of Pegu was too devout to confess himself a dupe, and so declined the overtures of the Kandyan king. When Kandy was ceded to the British crown in 1815, the TOOTH seems to have been stolen from its sanctuary by some of the natives, and during the next two or three years, when the spirit of rebellion was rife through the kingdom, this palladium was paraded to arouse the fanatical enthusiasm of the people against their European masters. At length, however, it was recovered in 1818, and restored to its depository in Kandy. From that time it was in the keeping of the British. The Hon. Mr. Turnour, who has given the most particular account of the relic, published in 1837, concludes by mentioning that he had held official custody of it since 1828; it having been found necessary for the tranquillity of the country that the British government should retain so precious an object in its own possession. During the period of his charge, he says:—"The sixfold caskets in which it is enshrined have been twice opened; once in May 1828, at the request of the natives, when a magnificent festival was celebrated, which lasted a fortnight; and once in 1834, to admit of Sir Robert and Lady Horton seeing it, on which occasion the scientific Austrian traveller, Baron von Hugel, was also present. The keys of the sanctuary are never absent from my library, excepting during the actual performance of the daily religious ceremonies, and at night a military guard is posted at the temple."

In 1839 the relic was finally given up to the native chiefs and priests.

The Singhalese maintain that the TOOTH, still treasured in the strong tower at Kandy, is the genuine relic, which was preserved from the Portuguese spoilers by secreting it at Delgamoa in Saffragam. The Burmese were also convinced that they were the possessors of the veritable article; and when Col. Yule was on a mission to Ava in 1855, he saw at Amarapura "a square edifice, representing the depository of the TOOTH of Buddha, which, in ancient times, was preserved within the royal precincts." In descending the river to Rangoon, on the return of the mission, they were shewn at Nyoungoo the Leegoong pagoda, which enshrines a facsimile of one of Buddha's "TEETH." On the other hand, the Portuguese were equally confident that it was the true and original TOOTH that was destroyed at Goa, and the circumstantial details of the transaction given by their historians bear all the appearance of authenticity Sir J. Emerson Tennent remarks:—"The incidents of this narrative are too minute, and their credibility is established by too many contemporary and concurrent authorities, to admit of any doubt that the authenticity of the TOOTH now preserved in the Maligawa at Kandy, is no higher than its antiquity, and that the supposed relic is a clumsy substitute, manufactured by Wikrama Bahu in 1566, to replace the original *dalada* destroyed by the Portuguese in 1560. The dimensions and form of the present *dalada* are fatal to any belief in its identity with the one originally worshipped, which was probably human, whereas the object now shown is a piece of discoloured ivory about two inches in length, and less than one in diameter, resembling the tooth of a crocodile rather than that of a man." The same writer adds:—"The apartment in which it is deposited is in the inmost recess of the Wihara, a small chamber without windows, in which the air is stiflingly hot, and heavy with the perfume of flowers. The frames of the doors are inlaid with carved ivory, and on a massive silver table stands the bell-shaped *carandua*, the shrine, which encloses the relic, encrusted with gems, and festooned with jewelled chains. The outer case contains a number of others, similarly wrought, but diminishing in size, till on removing the inner one, a golden lotus is disclosed, in the centre of which reposes the mysterious TOOTH."

Widely as the renown of the sacred TEETH had become disseminated, it may well be conceived their fame would easily reach China, and accordingly we find in the annals of the empire several notices of these sacred objects:—In the year A.D. 428, a model of the shrine containing the sacred TOOTH was sent to the Emperor of China by Maha Nama, the Rajah of Ceylon.

In 530, a TOOTH of Buddha was brought to China by a Persian embassy.

In the 13th century, when Ceylon came under Mohammedan domination, the Buddhist relics were readily appropriated by the intruders. Buddha's footprint became the footprint of Adam; the hill on which it is impressed became Adam's peak; and the TEETH of Buddha were designated Adam's TEETH. We need not be surprised to find such a collector of curios as Kubla Khan, who could despatch an embassy to Jerusalem, to obtain a few drops of the oil from the lamp in the holy sepulchre, fitting out an expedition also to obtain some of the TEETH and other relics of our great progenitor. This, Marco Polo tells us, he did in 1284. "And they were so urgent that they succeeded in getting two of the grinder TEETH, which were passing great and thick." Having obtained these and the other relics for which they were sent, they returned to China. "And when they drew near to the great city of Cambaluc where the Great Khan was staying, they sent him word that they had brought back that for which he had sent them. On learning this the Great Khan was passing glad, and ordered all the ecclesiastics and others to go forth to meet these relics, which he was led to believe were those of Adam. In sooth, the whole population of Cambaluc went forth to meet those relics, and the ecclesiastics took them over and carried them to the Great Khan, who received them with great joy and reverence;—and a mighty great treasure they did cost him."

That these teeth really reached Peking there is every reason to believe; but what was their subsequent history I have no means of ascertaining. Colonel Yule suggests the possibility of one of them being identical with one now preserved in a monastery on Koo-shan (Drum mountain), near Fuhchow. The late Dr. Medhurst who visited this monastery, has the following characteristic observations on the TOOTH. "The other relic is a large TOOTH, called by the priests a TOOTH of Buddha. The nature of this is more patent, and it is evident to all observers that it is no other than the molar tooth of an elephant, about six inches long, by 2 in broad and 3 in deep. On observing this, it was immediately suggested to the priest that the tooth in question was that of an elephant and not that of a man. The priest continuing to assert that it was a veritable Buddha's tooth, he was asked how large he supposed Buddha to have been? He replied 16 feet high. Granting, it was said, his enormous size, upon what did he live? Upon grain and fruits was the reply

But he was requested to notice that a TOOTH such as that in question was not designed for the chewing of rice and cakes, but for the grinding and masticating of the roots and branches of trees, with reeds and rushes. He began now to open his eyes, and candidly owned that he did not know whether it was a TOOTH of Buddha or an elephant, but it was handed down to him for a Buddha's TOOTH, and as such he shewed it. He was advised henceforth never to repeat the assertion, at least to foreigners, as by so doing he would only expose himself to ridicule."

In 1405, a mission from China, sent with incense and offerings to the shrine of the TOOTH, was insulted and way laid, and with difficulty effected an escape from Ceylon. This treatment however cost the latter country dear; for in 1408, the Emperor sent Ching Ho with a fleet and large military escort, who invested the capital, took captive the king, with his queen, his children, officers of state and attendants, and carried them to China together with abundance of spoils. One Chinese account says that amongst the articles carried away was the sacred TOOTH of Buddha, but it is safe to affirm it was not the celebrated article.

Probably the most singular of all the reputed relics of Buddha is what has been called the EXCRESCENCE OF HIS SKULL-BONE. The original word is *Ushnisha*, and from the difficulty of ascertaining the exact meaning, this word is often used in European writings. There is a great diversity of opinion among those who are best acquainted with the Sanskrit language, as to what it implies. Among the different definitions given to the word, are—1, "a turban,"—2, "the curly hair with which Buddha was born,"—3, "a particular way of dressing the hair turban fashion,"—4, "a fleshy protuberance on the head."—5, "an excrescence of the skull bone." The relic-mongers however have definitively settled the question, by exhibting the veritable article. And this is a tradition of very respectable antiquity; for it was seen by the Chinese pilgrim Fa-hien at the city of Hida near Nagarahara in the beginning of the 5th century. His own account runs thus:—"In the city of Hidda is the Vihara, containing the relic of the SKULL-BONE EXCRESCENCE of Buddha. This Vihara is entirely covered with plates of gold, and decorated with the seven precious substances. The king of the country reverences in a high degree this sacred relic. For fear any man should carry off the true bone and substitute another in its place, he appoints eight persons belonging to the principal families of the country to seal up (every night) the door of the

shrine, each one with his own seal, so as to guard and protect it. At early dawn these eight men all go to the temple, and each one observes if his seal is as he left it. They then open the door, and having washed their hands with perfumed water, take out the bone of Buddha, and place it upon a lofty throne which is erected outside the shrine. On this throne is a circular table composed of the seven precious substances, with a crystal bell-shaped cupola on the top. Both the table and the cover are highly decorated and enriched with gems, about four inches in diameter and elevated in the middle. Each day after it is removed, certain men appointed for the purpose ascend a lofty belfry and beat a great drum, blow the conch and clash the cymbals. When the king hears it, he immediately repairs to the Vihara and offers flowers and incense; having done this, he repeatedly bends his head to the ground in adoration and departs. He enters by the eastern gate and departs by the western. Thus does the king discharge his religious duties every morning, and after worship proceeds to attend to governmental affairs. The chief men and nobles also attend to these acts of worship first, an indispensable duty of every day. After the acts of worship are over, they then return the relic to its shrine.

A century later the place was visited by Sung-Yun another Chinese pilgrin, who says:—"There is the SKULL-BONE EXCRESCENCE of Buddha, four inches diameter, of a yellowish-white colour, hollow underneath, sufficient to receive a man's finger; to the touch it is soft as wax.

Heuen-chwang who was there in 630, apparently describing the same Vihara, says:—"On the second floor there is a small pagoda made with the seven precious substances, in which is deposited the SKULL-BONE EXCRESCENCE of Buddha. This bone is one foot two inches in circumference, and the apertures for the hair are distinctly visible. It is of a yellowish-white colour. It is enclosed in a precious casket in the centre of the pagoda. Those who wish to know the measure of their virtues or their vices, make a paste with scented powder, and take a cast of the bone; when the marks upon the paste are in accordance with the character of the person using it."

This notable bone however does not seem to have been without a rival; for we are told that, to the north west of the city of Kapissa, is a convent, called 'the Ancient King's Convent,' where may be seen a fragment of the SKULL-BONE EXCRESCENCE of Buddha. It is about an inch broad, of a yellowish white colour, and the apertures for the hairs are plainly discernible.

Strange as it may seem, China also lays claim to a portion of

this highly-valued relic ; which may be seen by visitors to the city of Foochow, who choose to make a short excursion to the temple where the tooth is preserved. Mr. Fortune relates the interview at which he got a sight of it.[1]

Besides the excrescence bone in the Vihara at Hida, Heuen-chwang tells us that in the same building there is a small pagoda, made of the seven precious substances, which contain Buddha's SKULL itself. He says it is in shape like a Lotus leaf, and the same colour as the excrescence bone. It is also enclosed in a precious casket.

Another division of the personal relics seem to have been very profusely distributed,—the HAIR and NAILS which are generally found together. In narrating the legend of the cremation of Buddha's body, Heuen-chwang says that the HAIR and the NAILS remained in the same condition as before, having undergone no change. The town of Te-wei about fifty *le* north-west of Balkh and Pole, about forty *le* north of the same city, each contained a pagoda about thirty feet high. In these several buildings were deposited some of the HAIR and NAILS of Buddha. When Buddha began his public ministry, his first auditors happened to be two men belonging to these towns respectively, and on taking leave, they received from the Sage these mementos in answer to their request.

In the same convent that contained the fragment of Buddha's Skull-bone excrescence, north-west of Kapissa, we are told there was one of Buddha's HAIRS, of a bluish-black colour. It was curled up to the diameter of half an inch, but when drawn out was about a foot in length. At each of the six fasts in the year, the king and his minister spread flowers in honour of this HAIR and bone. Near Nagarahara, the place is marked where Buddha shaved his head and pared his NAILS. Seng-yun says,—"Some of the Buddha's HAIR was there." About twenty *le* south-west of the city of Kushinagara, there was a pagoda containing some of the HAIR and NAILS of Buddha.

To the south-east of the city of Sroughua represented by the modern Sugh, at the foot of the Himalayas, was a pagoda in which was deposited some of the HAIR and NAILS of Buddha.

At the city of Govisana on the site of the present Kashipur, there were two pagodas, each about ten feet high, containing some of the HAIR and NAILS of Bunddha.

At Sankisa on the Kalindri river, Ta-keen says:—There is a tower on the spot where Buddha when in the world cut his HAIR and his NAILS."

1. See "Tea Districts" p. 140.

To the north-west of the city Kanoj was a little pagoda, containing some of the HAIR and NAILS of Buddha.

About two or three miles south-west of the same city was a little pagoda which contained some of the HAIR and NAILS of Buddha. If an invalid, with strong faith, reverentially circumambulated this pagoda, he invariably recovered his health and attained happiness. About three miles to the north-east of the same city was a pagoda, which contained some of the HAIR and NAILS of Buddha.

About two or three miles north west of the city of Ayuda, which General Cunningham locates by the present Kakupur on the Ganges, there was a pagoda containing some of the HAIR and NAILS of Buddha.

About two miles south-west of the same city was a pagoda, containing some of the HAIR and NAILS of Buddha.

A little to the south-east of the city of Hayamoukha, which Cunningham thinks may be identified with Daundia-khera on the northern bank of the Ganges, there is a pagoda built of blue stones, which contains some of the HAIR and NAILS of Buddha.

On the south west of the city of Prayaga, the site of which is now occupied by Allahabad, there was a pagoda containing some of the HAIR and NAILS of Buddha.

About three miles south-west of the ancient city of Kozambi, lately identified on the banks of the Jumna, there was a pagoda containing some of the HAIR and NAILS of Budddha. Invalids coming there to pray generally obtained the recovery of their health.

At the city of Kusapur, on the site of the present Sultanpur on the river Gumti, there was a pagoda containing some of the HAIR aud NAILS of Buddha.

On the south of Vaisakhi, a city on the Ghagra river, there is a pagoda containing some of the HAIR and NAILS of Buddha.

A hundred *le* to the north east of the city of Janakpur, there was a pagoda containing some of the HAIR and NAILS of Buddha.

By the side of the famous monastery of Nalanda, seven miles north of Rajagriha, the ancient capital of Magadha, there was a pagoda which contained the HAIR and the NAIL-PARINGS that Buddha had cut during the space of three months. Persons afflicted with severe complaints, come to circumambulate the building, and many of them recovered their health.

In a forest to the north-east of the city of Avanda, which Cunningham identifies with the ancient city of Brahmanabad, on the river Sind were a line of several pagadas in sight of each other, marking the places where the four preceding Buddhas had

sat. Each of the buildings contained some of the HAIR and NAILS of the Buddha. On every fast day, the greater part of them emitted a bright light.

Five or six *le* to the east of the ancient sacred city of Madura, there was a pagoda which contained some of the NAIL-PARINGS of Buddha.

The last of the personal relics which I shall name is perhaps the most astounding of all. Heuen-chwang, who transmits the tradition, tells us that about two hundred *le* to the south of Mungali the capital of Udyana, at the foot of a pagoda there is a yellowish white stone, which is always moist with an oily matter. The reason is that when Buddha, while yet in the Bodhisattea state, after having heard the law, broke one of his bones at this spot, and wrote out some sacred books with his MARROW, which has never dried up.

Such then is a tolerable catalogue of the *post mortem* remains of the renowned Sakya-muni, that I have been able to extract from the Travels of the Chinese pilgrim. Of the twenty four places where portions of the body of the saint were preserved, the aggregate found in ten places was nearly two bushels; the amount in the other fourteen places is left indefinite, but in several of them it is said to be large, and it will probably not be exorbitant if we add another bushel, making in all three bushels, equal to eight and a half cubic feet of the flesh and bones of Buddha. Of his teeth, eight are accounted for in India, two of these an inch long, two of them, an inch and half, and one, five inches long. Thirty seven more are reported in Burmah and China, making a total of forty-five teeth. With a skull the shape of a Lotus leaf and a wart four inches in diameter crowning the summit; add to which a pair of eyes the size of two plums, and a profusion of Hair and Nail-parings scattered over the country in twenty-two shrines, a skilful anatomist might feel competent to attempt the task of reconstruction. Could such a feat be accomplished, we might perhaps find that the Fuhchow priest s estimate of sixteen feet for the height of Buddha would not very greatly exceed the result. There is a tradition that an image of Buddha sixteen feet, high was made during his lifetime, in the neighbourhood of his native place; and in the course of transmission from age to age, the attributes of the image may have got transferred to the original, in the minds of some of his less advanced disciples.

Notwithstanding the precision with which the distribution of Buddha's remains is related by the authorities already quoted we have in the Imperial Chinese Geography, the startling statement

that the body of Buddha is still to be found intact, in a monastery at the foot of Adam's Peak, reclining on his side on a couch.

Next to the personal relics, and scarcely inferior, is the adoration that has been paid to the sacred impressions of the Holy man. The most wide-spread of this class is certainly the FOOT PRINTS of Buddha, which are to be found in most Buddhist countries.

Quoting from Heuen-chwang's account of the famous cavern near Nagarahara,——"Outside the entrance to the cavern there are two square stones. On one of these is seen the FOOTPRINTS of Buddha; and on these appear the figure of the wheels, which always emit a brilliant light. This was noticed a century earlier by Sung-yun, who says:—"Before the cave is a square stone, on which is a PRINT of Buddha's FOOT."

Fa-hien, in describing Udiyana, at the beginning of the fifth century, says:—"According to tradition,—When Buddha visited North India, he at once came to this country. When he left, he bequeathed to them an IMPRESSION of his FOOT." The appearance of the impression is large or small, according to the intensity of the religious feeling of the person who beholds it. It exists to the present day. Sung-yun says:—"Eighty *le* to the N. of the royal city there is the PRINT of the SHOE of Buddha on a rock. They have raised a tower to enclose it. The place where the print of the shoe is left on the rock, is as if the foot had trodden on soft mud. Its length is undetermined, as at one time it is long, and at another time short. They have now founded a temple on the spot, capable of accommodating seventy priests and more." Speaking of the same, Heuen-chwang says:—"About thirty *le* south-west of the spring of the dragon Apalâla, on a great rock on the north bank of the river Swat, is seen a PRINT of the FEET of Buddha. They appear long or short, according to the virtue of the person who sees them. The impression was left by Buddha, before his departure when he had conquered the dragon. Subsequently people collected stones on the rock and erected a building People came from all parts to offer flowers and incense."

Again, Heuen-chwang says:—About two hundred *le* to the south of Mungali the capital of Udiyana, there is a large square stone on which are preserved the FOOTPRINTS of Buddha. When Buddha trode on this stone, it emitted ten thousand rays, illuminating the convent of Mahavana."

At Sankisa on the river Kalindri, we are told by Heuen-chwang:—"There are some large blocks of stone, fifty feet long and seven feet high. Buddha took exercise on these, and the

FOOTPRINTS which he has left all shew figures of the Lotus." This was one of the most famous places of Buddhist pilgrimage, and has the following curious legend connected with it:—"Maya the mother of Buddha, dying seven days after his birth, ascended to the abode of the thirty-three gods of whom Indra was chief. But as she had no opportunity of hearing the law of Buddha there, her pious son ascended to heaven, where he spent three months instructing her. He then returned to earth by means of a golden ladder, accompanied on either side by the gods Brahma and Indra on silver and crystal ladders respectively. This legend, says General Cunningham, who recently visited the place, is firmly believed by the natives at the present day. Fa-hien says, that after the descent the ladders sank into the earth all but seven steps, over which a temple was built. Two centuries later Heuen-chwang said the ladders after remaining for several centuries had at last sunk completely into the earth; and in later times had been replaced by three staircases built of brick and stone, and ornamented with precious substances, over which in like manner a temple has been built.

On the south-west of the city of Prayaza (the present Allahabad), was a place, where Buddha had walked and left his FOOTPRINTS.

At the city of Shravasti were to be seen the IMPRESSIONS of Buddha, where he was accustomed to walk for exercise.

In the city of Patna, Fa-hien says:—"In front of the first pagoda built by Asoka, there is an IMPRESSION of Buddha's FEET, over which they have raised a chapel." Heuen-chwang, entering more into detail, says:—"Not far from the pagoda, there is a large stone, upon which Buddha walked. The IMPRESSION of his two FEET is still to be seen there, about eighteen inches long and six inches wide each. They both bear the figure of the wheel, and on the ten toes are raised figures of flowers and fish, a bright light issues from them at times. When Buddha was about to enter the *nirvana*, he went towards the city of Kushingara. Looking south towards Magadha, placing his feet on this stone, he addressed Ananda thus:—"I now leave this last IMPRESSION of my FEET; and on the eve of entering *nirvana*, I rest my thought on Magadha. A hundred years after this there will be a king, named Asoka, who will become illustrious in the world; he will establish his court here and rule over this country. He will protect the Three Precious Ones, and will control the demons and spirits." When Asoka ascended the throne, he removed his court to this place, built a city, and enclosed by a wall, the stone bearing

the sacred FOOTPRINTS. Being near his place, he constantly paid homage to it. Subsequently the kings of other countries coveted and wanted to carry it off; but although the stone was of moderate dimensions, notwithstanding the efforts of a great multitude, it was found impossible to displace it. More recently the king Shashanka, having abandoned the Buddhist faith, went to the stone, bent upon effacing the IMPRESSION, but as fast as they chipped the pieces off with the chisel, they united again spontaneously, and the figures appeared perfect as before. Seeing this he left the Ganges in all haste, and returned forthwith to his native country."

About five miles to the north of Patna, the FOOTPRINTS of Buddha were seen on a stone. Although the lines of the wheels were somewhat indistinct, still the form could be distinguished.

In the province of Kachh near the embouchure of the Guni branch of the Sindh river, Heuen-chwang says Buddha left several of his FOOTPRINTS, over which Asoka built six pagodas.

All the above rock impressions doubtless had a celebrity of their own; and in their day have had multitudes of pilgrim worshippers; but for European celebrity, none can in any way compete with the far-famed impression on Adam's Peak in Ceylon. This was visited by Fa-hien about the year 412. In describing the place, he says:—By his spiritual power, Buddha planted one FOOT to the north of the royal city, and one on the top of a mountain, the distance between the two being about a hundred miles. Over the IMPRESSION to the north of the royal city, is erected a great tower, 470 feet high." Old records speak of this tower, but the tradition is that the FOOTPRINT is now covered by the waters of the Kalany river. The other FOOTPRINT which is found on the summit of Adam's Peak, the highest hill in Ceylon, is thus described by Sir J. Emmerson Tennent:—"The indentation in the rock is a natural hollow artificially enlarged, exhibiting the rude outline of a foot about five feet long, and of proportionate breadth; but it is a test of credulity, too gross even for fanaticism, to believe that the FOOTSTEP is either human or divine. The worship addressed to it consists of offerings, chiefly of flowers of the rhododendrons, presented with genuflexions, invocations, and shouts of *Saadoo*. The ceremony concludes by the striking of an ancient bell, and a draught from the sacred spring, which runs within a few feet of the summit." In the native History of Ceylon, written prior to the 3rd century B.C. this is spoken of as the FOOTPRINT of Buddha. The Brahmans, however, claimed

it as the FOOTSTEP of Siva ; the Gnostics claimed it as that of Jen, the first man in their system ; the Mohammedans made it the FOOTPRINT of Adam; in later times some of the Chinese have attributed it to Pwan-koo, the first man according to their traditions; while some of the Portuguese Christians contended for St. Thomas, and others for the Eunuch of Candace Queèn of Ethiopia. Moses of Chorene, however, summarily disposes of all other claimants by pronouncing it to be the FOOTSTEP of the devil.

The great success of the impress on Adam's Peak, and the celebrity it attained, may possibly have provoked the emulation of the sovereigns of neighbouring nations. As a matter of fact, we find that in due time other FOOTPRINTS were discovered, one of the most famous of which was the *Phrabat* or Sacred FOOTPRINT of Siam. According to native accounts, it was discovered by a hunter named Bun, about the year 1604. When the news was taken to the king, he sent a number of learned monks to examine it. and compare it with the description of Buddha's foot in the sacred books. The Examiners reported that it was genuine, whereupon the king erected a shrine over it, and worshipped in person. To the present day it has continued a place of great resort for worshippers of all classes, especially in the cold season of the year; and is the great Siamese memorial of Buddha. Mr. Alabaster, who visited the place in December, 1868, says:—"On the walls of the building in which it is enclosed, are fixed two large gold plates, which are full-size representations of the design supposed to have formerly existed in the Phrabat itself...We next examine the actual *Phrabat*, which is in the centre of the building, and find it to be a hole in the rock about five feet long and two broad, perhaps a monster relative of the fossil shells we have seen outside. The grating which usually covers it is removed to enable us to see the bottom, but the temple is so dark that we cannot see much of it. We move aside some of the offerings lying on it, but can see nothing of the pattern except the five marks of the toenails—five grooves in the rock which some declare to have been made with chisels; and on inquiry we are told that the other marks were destroyed long ago by an accidental fire. Likeness to a foot there is none."

One of my earliest recollections of the British Museum,—and it is an object which has most probably attracted the attention of all who have visited that interesting institution,—was the huge gilt FOOTPRINT of Buddha, brought from Burmah; apparently about the size of the Siamese one, aud I think Mr. Alabaster declares the figures to be identieal.

A careful investigation would probably discover many of the FOOTPRINTS in China. I see Mr. Alabaster mentions one in Canton. I shall at this time only notice one which is to be found near the famous temple of Yuh-wang, about eighteen miles east from Ningpo; for there Buddha himself is reported to have stood in the flesh. An old legend speaks of IMPRESSIONS of both the RIGHT and LEFT FOOT, at a distance of two miles between the two; but I am not aware that a second Impression is now known. I will here quote Mr. Milne's account of his visit to the honoured spot. He says:—"On the edge of a rock in the grounds, an IMPRINT of Buddha's FOOT was shown with much solemnity. When pointed out to me, I took the pains to measure,—seven inches broad at the toes, and five at the heel. It was three inches deep in the rock. In evidence of its being genuine, a priest spat on it, to show how rapidly it would dry up. The spittle of the bonze, however, would not evaporate on the occasion."

The above enumeration has already extended to too great a length, but it is far from having exhausted the list of objects. Among the more notable of the others may be named the SHADOW of Buddha in a cavern, seen by those who have sufficient faith; his GOWN and ROBE somewhat deteriorated through the ravages of time; IMPRESSIONS of this GOWN on the rocks in several places; his STAFF; his BEGGING BOWL, still to be seen at Kandahar; his TOOTH-PICK; his BROOM; his WASH-BASON; the WELL where he drank; the POND where he BATHED; the POND where he WASHED his BOWL; and the POND where he WASHED his CLOTHES.

This is far from being a complete catalogue after all. Nearly all the objects above-named were seen by the single traveller Heuen-chwang and are the relics of the great Sakya-muni himself; but besides these the relics of the canonized followers of Buddha that came under his observation would swell the collection to several times the amount.

In bringing these things before your notice, it is by no means my object to adduce them as a reproach to Buddhism. The truth or falsehood of that system must rest on other grounds than this, which I have no intention of touching at present. Christianity is not in a position to fling stones in that direction. The history of relics in the Christian church would reveal a very dark chapter in the annals of superstition; probably little if any inferior to the Buddhist vagaries. The memories of some here present must carry them back to the time when the "Garment of our Lord" was exhibited at Treves, creating quite a European sensation, and drawing many hundreds of worshippers to it day by day. To one

who has not seen them, the number of relics publicly exhibited in the principal churches of France and Italy is almost incredible. Portions of the true cross have been exceedingly numerous, and there is scarcely a Saint in the Calender, of whose skeleton a portion may not be found in some sanctuary or another. At Cologne are to be seen the skulls of the Three Wise men from the East who came to pay homage at the birth of our Saviour. In the Kremlin at Moscow, I have witnessed the unceasing stream of worshippers devoutly kissing the skull of a boy, supposed to be the last of an old Russian dynasty who was murdered early in the seventeenth century. Those who are best informed say the thing is an imposture. In the same church are preserved a few drops of the blood of John the Baptist, shed after his decapitation. In a neighbouring church is exhibited a nail from the true cross, a robe worn by our Saviour, and part of one worn by the Virgin Mary. Such emblems of a dark age defy enumeration. Take for instance the following incident narrated by the well-known historian of the Reformation, which is quite entitled to rank with the story of Nikrama Bahu's spurious tooth at Ceylon.* The scene is at Berne in Switzerland, in 1520. "The clergy, council, and corporation had assembled in front of the Upper Gate, waiting for the skull of St. Anne, which the famous knight, Albert of Stein, had gone to fetch from Lyons. At length Stein appeared, holding the holy relic wrapped in a covering of silk. As it passed, the Bishop of Lausanne knelt down before it. This precious skull, the skull of the Virgin's mother, is carried in procession to the church of the Dominicans, and amid the ringing of bells, enters the church, where it is placed with great solemnity on the altar consecrated to it, behind a splendid grating. But amid all this joy, a letter arrives from the abbot of the convent of Lyons, where the relics of the Saint were deposited, intimating that what the monks had sold to the knight was a profane bone taken at random from the burying-ground."

Even among the Israelites of old who were highly favoured in the enjoyment of a special divine guidance, we find the same wayward tendency to transfer to the creature, the worship that is due to the Creator, in the case of the serpent of brass; for it is put on record among the good deeds done by Hezekiah, when he ascended the throne, that—"he brake in pieces the brazen serpent that Moses had made; for unto those day, the children of Israel did burn incense unto it; and he called it Nehushtan. i.e. a piece of brass." Of the great lawgiver Moses himself, we are told, that—"he died in the land of Moab, according to the word of

the Lord; but no man knoweth of his sepulchre unto this day." Looking back on the history of our race since that time, we are forced to see more than human wisdom in that arrangement, Had it been otherwise, who can imagine the extravagancies that would have been enacted in a pilgrimage to the tomb of Moses, How many shrines would have been erected to the relics, real and imaginary, of this holy man;—and what an amount of foolery have we been spared, by the authoritative announcements that "no man knoweth of his sepulchre unto this day."

We may infer that a spirit very near akin to that of relic worship was prevalent among the Jews, when our Saviour uttered the burning words;—"Woe unto you, scribes and Pharisees, hypocrites! because ye build the tombs of the prophets, and garnish the sepulchres of the righteous.'

It were easy to find instances of the same practices in connexion with the Mohammedan faith, and—I am disposed to think—with every other system of religious profession that has dominated in the world.

The religions of the world, like nations and individuals, have their periods of infantile weakness, the energy of manhood, and the decrepitude of old age. They too are exposed to disease, which plays heavily on the constitution. The disease of relic worship seems incident to every system of faith, sooner or later; and in most cases this phase is the surest symptom of decay. There is this difference however, between Buddhism and Christianity;—that while the former has succumbed under the deadening influence of mere material worship, the latter having within itself a self-purifying and revivifying potentiality, is rising phœnix-like with rapidly increasing vitality from the ashes of its corruptions. The death knell of Buddhism has already been tolled; but the religion of truth is renewing its youth, and, as it were, beginning to bloom in immortal vigour, and will go on shining brighter and brighter unto the perfect day.

THE BIBLE IN CHINA.

Since the completion of the canon of the Christian Scriptures, few ages have passed without furnishing assailants of the sacred record; but these are probably outnumbered by the champions of the Book, who have boldly placed themselves on the defensive. If much has been written that is calculated to give pain to the humble believer, we have also to thank the controversy for calling into existence a class of writings in defence of the faith, which have received as yet no satisfactory answer, and bid fair to remain unanswered. Looking at the vain conflict of opinions that have emanated from the minds of philosophic thinkers, and the unsatisfying character of all other systems of religion apologists for the Bible have dwelt on the *necessity* of a Divine revelation, an argument which they have wielded with much effect.

I have no intention now to enter on this as a general question; but narrowing it down to the occasion, would say that there is nothing peculiar in the Chinese as a nation, to render them an exception to the argument.

The few dim traditions that speak of their golden age give us but scanty information regarding the moral and religious aspect of the people, or the doctrines propounded by their sages.

Confucius indeed in later times stands forward as the professed continuator and strenuous upholder of their principles. But powerful as are the claims of this great teacher, and wonderful as is the influence he has exerted in all subsequent ages, the history and present aspect of the nation strongly testify to the insufficiency of his doctrines, to satisfy the cravings of human

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Read at the Quarterly Missionary Meeting in Union Chapel, Shanghai, in April, 1868.

nature. It is but an act of justice to praise him for the purity and excellence of most of his lessons; at the same time it must be admitted that some of the greatest life problems are utterly ignored by him. We are told indeed that such was his sincerity in his religious observances, that he worshipped the spiritual existences as if he actually stood in their presence.[1] But when Chi-lu, an inquisitive disciple, interrogated the Master touching religious worship and a future life, the memorable answer which he handed down for the instruction of after ages is of the most vague and evasive character. "While you are insufficient for the service of men, how can you serve the spirits? While you do not understand life, what can you know about death?"[2] Tsze-kung, another disciple, on one occasion asked for a general rule of life in a comprehensive form. Confucius replies:—"Sympathetic benevolence is the rule. What you would not have others do to you, do not practice towards them."[3] A maxim worthy to immortalize the sage; and indeed the code of ethics he laid down is for the greater part unobjectionable, even from a Christian standpoint. Had man nothing but a moral nature, his teachings might be well adapted to secure the end proposed. But alas! the depravity of the human heart is left out of the account; and man is consequently utterly unable to effect that self-renovation which lies at the foundation of the whole scheme. The system is a beautifully-shaped automaton, but wanting the vital principle, so that it can only be kept in operation by artificial means. Confucius spent the greater part of a busy life, endeavouring to establish his principles; but at the close he had the mortification to find they had not made the progress he anticipated; and he died lamenting the fact that there was not one of the princes of the empire prepared to adopt his teaching. But it was not to remain so. The influence of his character and example, added to the purity of his lessons, gradually gave rise to posthumous honours, far exceeding anything that had been accorded during life.

The principles of Confucius however were interpreted in different ways. Other masters sought to gain the ascendancy over the popular mind; various and opposing were the views set forth; and some of these have been handed down to our own days. Thus we find Yang-chû boldly discarding the doctrine of a future life, and teaching men to give themselves up to the pleasures of sense as the only true wisdom. This was in fact a

1. Analects. Book 3, ch. 12.
2. Ibid. Ibid 11, ch. 11.
3. Ibid. Ibid 16, ch. 23.

very distorted scheme of Epicureanism ; and it is not surprising that the frigid code of Confucianism left the hearts of the people a prey to such pernicious counsels.

Another philosopher, named Mo-Jî, taught the doctrine of Universal Love, in a modified form ; and his opinions, we learn, made considerable progress in the empire. But his teaching wanted the sustaining principle ; human nature was unequal to its requirements ; and in the hands of his disciples, it appears to have run out into disorders social and political.

The doctrines of both these teachers were alike censured and confuted by Mencius, whose views have been preserved in the book known by his name. The questions regarding human nature, which are almost passed unnoticed, or merely hinted at by Confucius, are openly treated by this philosopher. The radical goodness of human nature is unequivocally declared, and illustrated by the phenomena of daily life ; while all his maxims are based on the assumption that perfect virtue is attainable by man, simply acting out the dictates of his nature. His views on that subject have left a great impression on the minds of the Chinese of subsequent generations.

But other doctrines on this subject were taught at the same period. For instance we find the philosopher Kaou maintaining that the nature of man is an open blank, susceptible of impressions either good or bad, but with no original bias towards one side or the other. His views are discussed by Mencius, whose condemnatory arguments have been deemed sufficiently conclusive.

Hsün-tsze, who lived at a somewhat later period, was for a time, a formidable opponent of the views of Mencius. Building on the same premises, he strenuously contends for the original depravity of human nature. As a teacher he stood on a par with Mencius for several generations ; but the latter ultimately secured the ascendancy among influential minds ; and Seun-tsze is merely referred to now as one of the philosophers of antiquity.

There are plausible points in both theories, and the consideration of these would no doubt attract adherents to each side ; but at the same time, the difficulties that attach to both would be equally apt to give rise to doubts which the theories of these teachers were insufficient to clear away. In order to evade these difficulties, Yang-Hsiung, another of the early luminaries, struck out a middle course, maintaining that the principles of good and evil are both inherent in human nature, and that this duality

manifests itself from the very earliest period of existence; the preponderance to one side or the other being merely the result of cultivation

These and other modifications divided the opinions of the learned for many centuries, but none have retained a firmer place in the popular mind than the doctrine of Mencius. This, however, can scarcely be said to be more than an abstraction, and very inadequate to meet the aspirations of man as an intelligent and immortal being. The doctrines of the literati throw no light on questions of the greatest interest, which lie at the foundation of all religion properly so called. They tell us nothing of a future state, and one side of human nature is altogether ignored by them. Abstractions are not calculated to engage the affections; and however excellent the moral maxims of the ancient philosophers, while the exciting motive was the mere love of virtue, a great void was left unfilled in the imaginations of the mass. Made for eternity, the spiritual part of man claims to know something regarding his ultimate destiny; and any system which leaves that element out of account must so far fail in its influence on the heart. Hence we cease to wonder at the facility with which Buddhism got a footing, and made its way among the Chinese.

A legend preserved in the national history, tells of Ming-ti an emperor of the Han, moved by a dream, sending an embassy to India, which returned with a party of Buddhist priests; and these having brought their sacred classics, inculcated their doctrines under imperial patronage and protection. This may be true, but still it is a very imperfect statement of the question. There was a spiritual dearth in the land, and Buddhism offered the only pabulum of the class required, to say nothing of its quality. Enough was found in the subtle treatises of this system to occupy and interest many of the cultivated intellects, and a want in the religious condition of the nation was to some extent supplied by the upward tendency it gave to the thoughts of the devotee, teaching him to look beyond the present state of existence, and thus gratifying the longing for immortality inherent in the human breast. It appealed to the hopes and fears of its votaries, and its plan of rewards and retributions was made appreciable to the humblest adherents. In it men felt they were not merely combining to carry into effect some abstract principle, but that their every action carried with it some corresponding result. Ages have rolled on, and Buddhism, if it has not strengthened its stakes, has at least lengthened its cords. Almost without a rival for thousands of years, the popular

part of the scheme has had a widespread influence over the masses; but as to raising them in the scale of humanity, or advancing their moral interests, it has been weighed in the balances and found wanting.

Taouism, *as a religious system*, is but a poor copy of Buddhism. In its present aspect, the production of a later age, scarcely a trace is left of the profound speculations of its reputed founder. It has already sunk deeper in corruption than its prototype, and even its most rigid followers will scarcely contend that it is destined to be the renovator of degraded humanity.

Such are some of the prominent characteristics in the mental and moral systems inculcated by the teachers of China through a long succession of ages. The result is patent to all. Can we say regarding them, that no higher guide than the mere unaided efforts of human intellect is necessary to lead men into the way of eternal truth?

In the teaching of Confucius and others of the old masters, many of the truths and maxims of an earlier traditional faith have been handed down. The belief in the unity and personality of God, the doctrine of filial piety, and other traces of the primitive religion, have acted as a preservative in the history of the empire. The excellence of many of the lessons and ethical institutes of the ancient philosophers is unimpeachable; but these are insufficient to change the heart, or restore mankind to a state of purity. They are of the earth, earthy.

One can appreciate the efforts of Buddhism to escape from a sin-polluted world and soar to the regions of bliss in other realms; but we see in the system little beyond the imaginary dreamings of a people given up to an endless round of speculation. It may be said of its founders and propagators: "They have hewn out to themselves broken cisterns."

We may freely admit that there is a great verity imbedded in the work of Laou-keun on Eternal Reason, or the *Logos;*—but it is a sealed book to the nation at large, who practically ignore the Author of nature.

Even the pantheistic teachings of the great Choo-hsi may have fragments of truth, although their efficacy is greatly nullified by the Godless system in which they find a place.

Deliberately discarding each and all of these systems, the result of the mental striving of a highly civilized nation, through a period upwards of two thousand years, we are as little prepared to accord our suffrage to the wretched electicism which is so prevalent; a structure composed of the heterogenous materials of

untiquated fabrics, but wanting in the perfection and symmetry indicative of a well-conceived plan.

In view then of the grievous deficiencies in every system which China has been able to produce, I do not hesitate to say that its religious history plainly indicates the need of a Divine revelation. That need is amply provided for in the Christian scriptures. Hence the obligation resting on the Christian church, to give the Bible to the Chinese.

I know the objections which are frequently thrown out, even by believers,—that the Chinese are too apathetic to care about religion, or too self conceited to receive doctrines imported from a foreign country.

To say nothing of the unphilosophical character of such objections, I maintain that they are by no means borne out by facts. The reception of Buddhism by the nation at large is a sufficient guarantee that the people are as capable of adopting new opinions as any other nation; and the zeal needful for the maintenance of the system through so many centuries, were it nothing more, amply vindicates them from the charge of inherent apathy. To the believer it should be sufficient to quote the words of inspiration:—"The Lord looketh upon all the inhabitants of the earth. He fashioneth hearts alike."

We do not indeed find the rampant fanaticism that characterizes the Hindu; nor is the spirit of self immolation and voluntary martyrdom at all prevalent. But it is not difficult to point to instances of religious zeal among the Chinese, perhaps unsurpassed by any people. It may suffice to quote the Buddhist priests, who, in their fervour for the purity of the faith, left their native soil, traversing long and unknown tracks to distant countries, enduring privation, toil and danger, and accomplishing journies which would be counted marvellous, even in these days of universal locomotion. Such was the priest Fa-hien, who passed beyond the Chinese frontier in the year 399, crossed Tartary, penetrated the mountains of Tibet. By means of cords, flying bridges and steps hewn in the rock, he cleared all but unapproachable chasms, and precipices 8,000 feet high, and returned to his native land by way of Java, having spent about fifteen years wandering through the various countries of India, and travelled between nine and ten thousand miles. Such were Sun-yun and Hway-sang, two devotees of the same fraternity, who traversed the countries of Badakshan, Oudyana, Kandahar and Eastern Persia, early in the 6th century, moved by a spirit of pious zeal. Many others fearlessly gave themselves to like enterprises, and have left a fund of infor-

mation of much value regarding Central Asia. But none have attained a greater fame than the priest Heuen-chwang, who left his native country in the early part of the 7th century, and after more than sixteen years spent in the cause of his religion, returned to China, to end his days in the further development of the same spirit. Speaking of Heuen-chwang's travels, a celebrated orientalist[1] says:—"There we learn something of the man himself, and of that silent enthusiasm which supported him in his arduous work. There we see him braving the dangers of the desert, scrambling along glaciers, crossing over torrents, and quietly submitting to the brutal violence of Indian Thugs. There we see him rejecting the tempting invitations of Khans, Kings and Emperors, and quietly pursuing among strangers, within the bleak wall of the cell of a Buddhist college, the study of a foreign language, the key to the sacred literature of his faith.—His whole life belonged to the faith in which he was born, and the object of his labour was not so much to perfect himself as to benefit others He was an honest man. And strange, and stiff, and absurd, and outlandish as his outward appearance may seem, there is something in the face of that poor Chinese monk, with his yellow skin and his small oblique eyes, that appeals to our sympathy—something in his life, and the work of his life, that places him by right among the heroes of Greece, the martyrs of Rome, the knights of the crusades, the explorers of the Arctic regions—something that makes us feel it a duty to inscribe his name on the roll of the 'forgotten worthies' of the human race." "He deserved to have lived in better times, and we almost grudge so high and noble a character to a country not our own, and to a religion unworthy of such a man." Men of such a stamp are by no means a rarity; and instances from the modern history of the nation might also be adduced. Some indeed strike us with wonder, and utterly remove the point from general aspersions cast against the Chinese. The deadening element is in the religion they have adopted, rather than in the people adopting it.

Assuming then that the Bible is the only book adapted to meet the spiritual wants of China, let us proceed to examine what has been done towards furnishing them with the sacred oracle.

Notwithstanding the decay of the traditional and patriarchal religion, it is observable how the monotheistical element prevails in the most ancient of the philosophical treaties now extant. This has induced some to maintain the early settlement of a portion of the Israelites in China, who had diffused such a knowledge of

1 Max Müller.

the truths of the sacred record, that they had become obscurely perpetuated in the teachings of these wise men of old. On a careful persual of such ancient writings, it is not difficult to admit the plausibility of the above hypothesis; nor is their anything extravagant in the notion of such a document arresting the attention of the thoughtful in all age and nations. While allowing, however, that the Hebrew records may have been not without a certain influence, in giving a tone to the writings of the early philosophers and teachers, it is obvious that this theory has been pushed too far by some of the Jesuit fathers, such as Premare, Cibot, Bouvet and others, who first brought these works to the knowledge of the European public. Some of these have professed to trace, not merely the unity of God, but also certain details regarding the creation, paradise, the tree of life, primeval happiness, the fall, the temptation, the Redeemer, his birth by a virgin and other Christian verities. It is evident there is much that is fanciful in such deductions, which have been denounced and rejected by more sober writers in the same communion. Although there is nothing impossible in the Chinese having had a knowledge of the Hebrew scriptures at a very early period, yet history furnishes no direct evidence to that effect; although it may be there are occasional vestiges in the national literature to corroborate such a supposition. If any part of the Old Testament however was translated, the manuscripts have probably long since perished for recent researches all lead to the conclusion that there is nothing of the kind now extant.

We are not left so much in the dark, however, regarding the operations of the early Christian settlers in China in the matter. In 1625, a stone tablet which had lain embedded in the ground for nearly eight centuries, was dug up at Si-ngan in Shen-si. From this interesting relic, which contains a summary outline of probably the first Christian mission to China, we learn that some emissaries of the Nestorian college at Nisibis in Persia, fired with a zeal for the spiritual welfare of this nation, braved the dangers of a journey through Central Asia, and reached the capital of China in 635. From the same source we derive information of much interest, touching our present subject; indicative of the great importance these pioneers attached to having the sacred record translated into the language of the country. In the commencement of the inscription there is an evident allusion to the Old Testament, in the statement, "The declarations of the *ancient law*, as given by the *twenty-four sages*, were fulfilled,"* on occasion

* 圓廿四聖有說之舊法

of the advent of the Messiah. An equally clear indication of the New Testament writings is found in the statement, that when the Messiah ascended to his original dignity, "*twenty-seven sacred books* remained;" † presenting an exact correspondence with the number held by the early Nestorians, and now acknowledged by the Christian Church at large. With this identification we are then told that the apostle Alopum came from Syria, "watching the azure clouds, and bringing with him the true *Sacred books*." ‡ Reaching the metropolis, after an introduction to the emperor, it is said,—"The *Sacred books* were translated in the imperial library." ‖ A subsequent part gives a portion of an imperial edict issued in 638, in which it is stated, that Alopum had "brought the *Sacred books* and images from afar, and presented them at the metropolis;" ¶ after which follows a declaration of the excellence of the Christian system, giving the impression that his majesty must have had the means of investigating the principles of the faith, through the medium of translations. In the ode which forms the principal part of this inscription, we find in the record of incidents during the reign of Taé-tsung, it is said,—"The *Scriptures* were translated, and churches were built." *

From these several notices, preserved to us in the durable records of a stone tablet, we gather with much confidence the impression that the New Testament, at least, was translated into Chinese during the first half of the 7th century; and this seems the more probable, when we consider that at that period, the emperor was engaged in a most extensive undertaking, translating the Buddhist works which had been recently brought from India by the Chinese traveller Heuen-chwang. The monastery where this work was executed was at a recent period still pointed out at Si-ngan. There is no supposition, amounting even to a probability, to place against these statements. Although the translation may have been completed, however, yet, as the art of printing was not generally practised till several centuries later, there was then no less laborious method of multiplying copies than by manuscript, which must necessarily have greatly circumscribed the circulation. By the time that typography came into general use, the Nestorian religion was probably on the decline; and

† 經留廿七部
‡ 占青雲而載眞經.
‖ 翻經書殿
¶ 遠將經像來獻上京.
* 翻經建寺

with a fading vitality, it is easy to conceive that the interest in the Holy Oracle might diminish; so that we hear very little subsequently of the actual existence of this ancient version.

We are not, however, left altogether without indications on the subject. In an incidental notice of a journey by Ibn Wahab, an enterprising Arab, to Chang-ngan, the capital of China, in the 9th century, we find an account of an interview he had with the emperor. The latter having produced a series of portraits for his inspection, Ibn Wahab proceeds to say "I recognized on these leaves the portraits of the prophets: at the same time I made my vows on their account, which caused a movement of my lips. The emperor, not knowing that I recognized the prophets, asked me through the interpreter why I moved my lips. To which I replied: 'I was praying for the prophets.' The emperor enquired how I had recognized them and I replied: 'By means of their distinctive characteristics. Thus, there is Noah in the ark, who was saved with his family, when the Most High God sent down the waters, and the whole earth was submerged with its inhabitants; only Noah and his company escaped from the deluge.' At these words the emperor laughed, and said: 'You have guessed right in recognizing this as Noah; as to the submersion of the whole earth, we do not admit the fact. The deluge could only have embraced a portion of the earth; it neither reached our country nor India.' Ibn Wahab states that he feared to refute what had fallen from the emperor, and to make use of the arguments he had at command, considering that the prince would not have been willing to admit them, but he continued:—'There is Moses and his rod, with the children of Israel.' The emperor said: 'That is true, but Moses appeared on a very narrow stage, and his people shewed themselves ill-disposed towards him.' I added: 'There is Jesus on an ass, surrounded by his apostles.' The emperor said: 'He appeared but a short time on the scene. His mission scarcely lasted more than thirty months.' Ibn Wahab continued to pass in review the different prophets; but we shall only repeat a part of what he told us. Ibn Wahab added that below each prophet's figure there was a long inscription, which he supposed contained the name of the prophet, the name of their country, and the circumstances which accompanied their mission."[1] From the preceding extract, there is reason to believe that the emperor must have been to some extent acquainted with the truths of Christian revelation; and

1 Relation des voyages faits par les Arabes et les Persans dans l'Inde et à la Chine. Paris, 895. pp.83, &c.

it is fair to assume that he may have been in possession of that translation of the Scriptures which was made under the direction of his great ancestor Tae-tsung.

Nearly four centuries later, we have the testimony of John de Plana Carpini, an Italian friar, who went on a mission, partly political, partly religious, from Pope Innocent IV, to the Mongolian court in 1245. In a very brief account which he gives of China, gathered from report, it is remarkable that he twice alludes to the fact of the Scriptures existing in that language. He says:—"But the men of Kitai (China) spoken of above, are pagans, having a particular kind of written character, and as it is said, the *Old* and *New Testaments*; they possess Biographies of their Forefathers, have hermits, and houses made in the fashion of churches, in which they themselves worshipped in former times; they say also that they have a number of saints. They worship one God, they honour the Lord Jesus Christ, they believe in eternal life, but are not baptized; they honour and reverence our *Scriptures*, respect Christians, and give much alms; they seem to be a tolerably kind and courteous people."[1] There can be no doubt, I think, that the Scriptures alluded to in this passage was the version in use among the Nestorians; and there seems a strong probability that it was the same, or a revision of that translated under the patronage of Tae-tsung of the T'ang.

A traveller nearly contemporary with the above, William de Rubruk, a Franciscan monk, who went on an embassy from Louis IX of France to the Khan of the Tartars in 1253, speaking of China, says: "The Nestorians there know nothing. For they repeat their services, and have the *Sacred books* in Syriac, a language which they do not understand, so that they sing as the monks do with us without knowing the grammar; and hence have become totally corrupt."[2] At first sight there appears a discrepancy between this and the previous quotation; but if we consider the actual practice of the Church of Rome, we shall see that there is no real inconsistency between the two statements; for it was only in accordance with the general practice of the Nestorian church to use the Syriac in their ritual services; nor is it to be supposed that this practice would be interrupted by the fact of the Bible having been translated into the language of the country.

1 Relation des Mongols ou Tartares par le frère Jean du Plan de Carpin Paris, 1838. p 257.

2 Recueil de Voyages et de Memoires publié par la Société de Georgaphie. Tome 4. p. 293.

The interesting narrative of Marco Polo's residence in China also states how the Four Gospels of the Christians were publicly honoured by Kubla-khan and his courtiers.[1] But this probably also refers to the Syriac version; and other authorities may be quoted to the same effect.

Almost the only relic that has come down to us of the Sacred books or formularies of this ancient and once flourishing church of the Nestorians in China, is a Syriac manuscript in the same character as that on the borders of the Si-ngan inscription. This was discovered about the year 1725, in the possession of a Mohammedan, the descendant of Christian or Jewish ancestors from the West. On examination, it was found to contain the Old Testament, from the beginning of the 25th chapter to the end of Isaiah, the twelve Minor Prophets, Jeremiah, Lamentations and Daniel, including Bel and the Dragon, with the Psalms, two Songs of Moses, the Song of the Three Holy Children, and a selection of hymns.[2]

A recent work indeed hazards the notion that, "there is reason for supposing that in certain mountain district, of China whole villages and tribes of Nestorian Christians are still found, and that they have preserved to this day the Scriptures among them."[3] Should this supposition be supported by evidence, it would prove a most interesting fact, and although it may not be said to be entirely destitute of probability, yet for the present it can scarcely be considered beyond the range of conjecture. The suggestion may receive some countenance from a passage in a letter by the late Rev. J. Goddard, Ningpo.

He says:—"A few days since, a respectable looking stranger came into our chapel, and listened with much apparent attention to the sermon. After service, he stopped to converse. He said that he and his ancestors had worshipped only one God. He knew of Moses and Jesus and Mary, said he was not a Romanist nor Mohammedan, neither had he seen our books, but that the doctrine was handed down from his ancestors. He did not know where they obtained it, nor for how many generations they had followed it. He is from one of the western provinces of China, and said that in his native place there are some thirty families of the same religion."[4] There is something in the above statement to

1 Navigations et viaggi. Ramusio. Venice, 1556, Vol. 2, fol. 20.

2 Notices et extraits des Manuscrits de la Bibliotheque Royale. Paris, 1831. Tome 12 pp. 277, &c.

3 Christianity in China. London, 1853. p. 32, note.

4 New York Observer for Sept. 2, 1852. p. 283.

awaken a feeling of Christian interest; and it is to be hoped that, with the advance of Christian missions in the interior, we may ascertain for a certainty whether any vestige of the Nestorian church still exists, and whether the ancient translation of the Scriptures is to be found, either whole or in part, among them.

Towards the close of the 13th century, when the Mongols had possession of the empire, John de Monte Corvino, a Franciscan monk of Calabria, who, when on an embassy from Pope Nicholas IV to Kubla-khan in Cambalu, translated a portion of the Scriptures into the language of the dynasty. Having taken up his residence there, he was afterwards made Bishop of the diocese; and in a letter dated 8th January, 1306, he writes:—"I have acquired a competent knowledge of the Tartar language and literature, which is the common language of the Tartars, and have now translated into that language and character the whole of the New Testament and the Psalms of David, which I have caused to be written in their most beautiful style, and I write and read, and preach freely and openly the testimony of the law of Christ."[1] It seems to have been the desire of the venerable prelate of Cambalu that the natives under his supervision should obtain a knowledge of the Word of Life.

How far he succeeded in this end, we have no certain information: but we are warranted in saying that he was conscientiously carrying out the objects of his mission, in giving out the Scriptures in the language of the people; for as we learn from a letter of Pope Benedict XII, about thirty years later, to some Tartar converts, a belief in the inspiration of the Old and New Testaments formed an essential article of the Catholic faith.[2]

If this work of Corvini was ever put to press, the probability is that it has long ceased to exist; for I have not heard of any ancient copies; while the translation of the Old and New Testaments into the Mongolian language, by the devoted missionaries Swan and Stallybrass, is now used by the mission of the Russian Greek Church to the Mongols, as well as Protestant missionaries in the north of China.

The Jesuits first made their appearance in China in the 16th century, and though they prosecuted the objects of their mission with a praiseworthy vigour, we hear nothing of a complete translation of the Scriptures having been published by them. Matteo Ricci, indeed, in a letter to Yu Chun-he, a metropolitan high functionary, early in the 17th century, excuses himself from the task, on the

[1] Historia Tartarorum ecclesiasica. Mosheim, Appendix No. XXXIV, p. 117.
[2] Historia Tartarorum ecclesiastica. Mosheim, Appendix, No. LXXVIII, p. 175.

plea of pressure of other matters.* The plea may have been so far valid; but it is probable other motives also weighed with this distinguished missionary.

When the celebrated convert, Seu Kwang-ke, addressed a memorial to the throne in 1616, in defence of the Jesuit missionaries who had been denounced by the Board of Rites at Nanking as traitors, he proposed a scheme for the translation of the Scriptures, to be used as evidence in their case.† Nothing further however seems to have come of the suggestion.

Several isolated and select portions of the Scriptures may be found in the Chinese publications of the Roman Catholics, and we are not without evidence that such detached portions have incited a desire among the natives to have more from the same source.

Selections from Scripture elegantly illustrated were at one time published, but they are now of an extreme rarity, and only to be met in the cabinets of the curious. In some works on the fine arts, we find specimen pages of these Christian books given as *Chêf d'œuvres* of wood engraving.

The most ample translation that has appeared in print from that source is the *Shing king chih keaé*,‡ by Emanuel Diaz, a Portuguese missionary, finished in 1636, being a version of the Gospels with the portions of other parts of Holy Scripture, several Sundays and feast days throughout the year, as appointed by the rubric, with an extended commentary, and reflections on each separate portion. This is written in a simple style, and has been recently republished.

Commendations of the Word of God, however, are not rare in the older Christian publications;[1] and these seem to have excited the suspicion of the more acute natives towards the book which was not accessible to them. Thus we find the complaint brought forward by Yang Kwang-seen, a high officer of the Astronomical Board, in a brochure which he published against Christianity, about the year 1660, that Mathew Ricci had suppressed some parts of the faith, in order to impose upon the people; while in a later publication, entitled *Puh teh è*, the same scholar remarks, "That Father Ricci who came to China in past years had quoted his *Bible*, and the comments of his holy men, in order to palliate his

* 辨學遺牘 *Pëèn hëo ê tuh.*
† 辨學疏稿 *Pëèn hëo soo kaòu.*
‡ 聖經直解 *Shing king chih keae.*

1 See Premare's Notitia Linguæ Sinicæ p. 233, &c.

vicious doctrines;"[1] a charge which he extends to other missionaries also.

From the remarks of Father Le Comte, we learn that a project was in contemplation by some of the missionaries in the 17th century for a translation of the Bible into Chinese, but circumstances proved adverse to the undertaking. Writing to Father De-la Chaize, the confessor to Louis 14th of France, he says:—"A translation of the Missal had been desired in order to say Mass in Chinese, according to the permission that had been obtained for that object; and an exact version of the *Holy Scriptures*. The Missal has been completed, and Father Couplet presented it to the Pope some years since; after having maturely considered the matter, however, it was not judged expedient to make use of it; and they continue to say Mass in Latin, according to the usual custom. As for the complete version of the *Bible*, there are such weighty reasons why it should not yet be given to the public, that it would be rash imprudence to make use of it; the more so that the substance of the Gospel, and even the most edifying parts of it, have already been explained in several of their books."[2]

We have authority however for saying that the Bible was translated, although not printed; for Dr. J. F. Gemelli Careri, an Italian gentleman, who visited Peking in 1696, in the confidence of the missionaries, while remarking on the self esteem of the Chinese, adds:—"The European missionaries have begun to undeceive them by printing five hundred books of the law of God, which they composed in less than a century; having translated the works of St. Thomas, and also the *Holy Scriptures*."[3]

It is probable indeed from the occasional notices that we meet with, that more versions than one may have been executed. Thus we are told that the New Testament in Chinese was in use in Father Ripa's Chinese college at Naples, at the beginning of the present century. In the earlier part of Dr. Morrison's residence in China, he was on several occasions distinctly told, by missionaries and converts of the church of Rome, that the Old and New Testaments had been translated, and were in use among the Christians in Peking;[5] and from one of the body, he procured a

1 Tratados Historicos, y Religiosos de la Monarchia de China. Navarette p. 357.

2 Nouveaux Memoires sur l'état present de la Chine. Le Comte Paris, 1701. Tome 2, pp. 223, 224.

3 Giro del Mondo. Naples, 1700. Tome 4, p. 198.

4 Memoirs of Father Ripa. London, 1861. p. 159.

5 Memoirs of the life and labours of Robert Morrison, D. D. vol 1, pp. 169, also. 348

translation of the Gospels, made by a missionary early in the century.[1] In the British Museum there is a manuscript volume in Chinese containing a Harmony of the Gospels, the Acts of the Apostles, and all the Epistles of Paul, excepting that to the Hebrews, of which there is only the first chapter. The author of this manuscript is not known, but it was brought to England by Mr. Hodgson of the East India Company in 1739, he having obtained it at Canton, and give it to Sir Hans Sloane. Along with the collection of MSS. belonging to the latter, it came into possession of the Museum.[2]

Previous translations, however, do not appear to have been considered very satisfactory, if we may trust Abbe Dubois, a renegade Indian missionary, who writing under date August 7th 1815, makes the following statement, with a view to disparage the labours of Protestant missionaries:—"About twenty-five years ago, the French missionaries, in the province of Sutchuen in China, were earnestly requested by the congregation *De Propaganda Fide* at Rome to translate the Gospel into Chinese, and send a copy to them. The missionaries answered, that as the Chinese language did not admit of a literal translation, they had a long time before, compiled a work in Chinese containing the history and moral of the Gospel, for the use of the congregations, and that nothing more could be satisfactorily executed on the subject; yet, as the request was urgent, they prepared, with the assistance of their best informed proselytes, a translation of the Gospel of St. Matthew, a copy of which they sent to Rome, informing, at the same time, the congregation *De Propaganda,* that the translation of this Gospel alone, obtained with the assistance of many well-educated natives, had cost them considerable labour and trouble; adding that this literal translation differed so widely from the Chinese style, that even their converts would hardly refrain from laughing in perusing it."[3] Now the inference which the Abbé obviously wishes his readers to draw from the above statement is very clear; but if all his reasonings are based on a similar foundation, there is little difficulty in estimating them at their true value. We have now the most triumphant answer to the argument he wishes to establish.

1 Thirteenth Report of the British and Foreign Bible Society. 1817. p. 15.

2 The following note is affixed to the manuscript. "MS: Or: 22 XXXC. Evangelia quatuor Sinice MSS. This Transcript was made at Canton in 1738 and 1739, by order of Mr Hodgson, junr, who says it has been collated with care, and found very correct. Given by him to Sir Hans Sloane in Sept. 1739

3 Letters on the state of Christianity in India. London, 1823 pp. 30, 40.

I find there is in the library of the Propaganda at Rome a translation of the New Testament into Chinese, in seven volumes, by J. Basset,[1] but have no knowledge of who the author was, or the date of translation.

We see then that up to the commencement of the present century, no version of the Scriptures had been published, as far as our information goes; and if translations existed, they were confined to private hands, and not available to the people at large.

The period in question was specially marked by a new development of Christian life, in the formation of those large societies which had for their object the extension of gospel truth to the uttermost bounds of the habitable globe; and it was left for the Protestant Church to have the honour of giving to the Chinese the Bible in their own language.

It is remarkable that two independent chains of events were working contemporaneously towards the same object. The first decided action in the matter is due to the Rev. Claudius Buchanan, Vice-Provost of the College of Fort William at Calcutta. Soon after the foundation of this college in 1800, a department was appointed for translating the Scriptures into the oriental languages; and besides the several dialects peculiar to India, the directors turned their attention towards securing a version for China. Mr. Joannes Lassar, an Armenian Christian, and native of Macao, being tolerably proficient in the Chinese language, was appointed Professor of the same, his special duty being to translate the Scriptures; a work which he began in 1804, or early in the following year. After some three or four years, he removed to the Baptist mission at Serampore, where the work was continued under the superintendence of the Rev. Joshua Marshman, a gentleman who had attained such a proficiency in Chinese as to fit him to take a great part of the responsibility on himself. By their joint labours, and competent native Chinese assistance, the whole Bible was brought to a conclusion in 1820, and printed at Serampore, by 1822. This, which was the first known entire printed version of the Scriptures in Chinese, was a remarkable monument of persevering industry and untiring zeal, and must rank as not the least conspicuous among the multifarious labours of the devoted and self-denying Marshman; sixteen years having been spent in its production. The version as might be expected is rude, and to a degree unidiomatic, as most first versions in the oriental languages necessarily are; but although it has not been circulated

1 Melanges Asiatiquos. Remusat Paris, 1825. Tome I. pp 12, 13.

to the extent perhaps anticipated by its pious author, yet it has doubtless been useful in promoting the great object of the Chinese mission. It would be unfair to withhold from Dr. Marshman the tribute of praise due to his talents, his learning, and his fervour in the Christian cause; but it has been thought that he was going beyond the legitimate sphere of his operations in devoting so much time to the Chinese version. On this point his son remarks:—"At this distance of time, however, and on an impartial review of the circumstances and wants of the Serampore Mission, the appropriation of Mr. Marshman's strength to a distant object of doubtful expediency cannot be regarded without some feeling of regret."[1]

Reverting to the year 1802, we find the attention of the public in England drawn towards the state of religion in China, by the Rev. W. Mosely, who published a memoir "on the importance and practicability of printing the Sacred Scriptures in the Chinese language, and circulating them in that vast empire." This was sent to the Society for promoting Christian Knowledge that same year by the Archbishop of Canterbury, together with a note from himself on the subject. The matter was referred to the East India Mission Committee, but we do not hear of any action thereon.

It was not however destined to fall to the ground. The question, once mooted, had set many minds a working; and unpropitious as were the first efforts, the work was destined to proceed. In 1804, the British and Foreign Bible Society was established, the special cause of its formation being to supply the Welsh with Bibles in their own language. The next object that came before them was the question of furnishing the Chinese with the Bible. Dr. Antonio Montucci, who had given some attention to the Chinese language, drew the attention of the Committee to the existence of the Manuscript Harmony in the British Museum, before mentioned. Should it be thought expedient to print it, he offered his service as editor; earnestly recommending its publication, "for the benefit of three hundred millions of people." The Committee were to some extent prepared for such a proposal, by the recent perusal of Mr. Mosely's memoir; and they forthwith set on foot the necessary preliminary inquiries. On procuring estimates for the printing, however, the extraordinary price proposed was such as to decide them to abandon the enterprise, for the time; one thousand copies being estimated at little less than two thousand five hundred pounds, and five thousand copies at more than six thousand pounds.

1 The Life and Times of Carey, Marshman, and Ward. London, 1859. p. 345.

It will be seen, however, that the Manuscript Harmony was not altogether fruitless. From an early period in the history of the London Missionary Society, some of the founders, in their benevolent review of the state of the heathen world, had in anticipation extended their operations to China, scarcely second in importance to any other nation, as being the dominant power in Eastern Asia, and containing about a third of the world's population. To many the difficulties of such a project appeared altogether appalling; and so imperfect was the knowledge generally possessed regarding China, that some doubted the practicability of acquiring the language to any tolerable degree.

A mission to China was proposed, however, and warmly approved by the Directors. The more immediate object proposed to this mission was the acquisition of the language, and the translation of the Scriptures. About the end of 1804. Robert Morrison, then a missionary candidate, was appointed to China as his station, and proved to be the right man in the right place. The Manuscript Harmony was placed in his hands, and with the assistance of Yong Sam-tak, a Chinese then in London, he transcribed the whole;[1] and this formed the basis of his future work.

So little favour did the object of his mission receive at first from the East India Company, that Morrison was refused a passage by their ships, and found it necessary to proceed to New York, where he shipped for China. On September 4th, 1807, he reached his destination, and from that time set himself with untiring zeal towards the completion of the translation. Many of the gentlemen of the Company's factory at Canton looked with much jealousy and fear upon Morrison's translatorial advances, while others were favourable to the project. The remarks of Mr. Roberts, the chief of the English Factory, while on his death-bed do honour to that gentleman, and are worthy of the representative of a Christian nation. His words were:—"I see not why your translating the Sacred Scriptures into the Chinese language might not be avowed, if occasion called for it. We could with reason answer the Chinese thus:—'This volume we deem the best of books. Mr. Morrison happens to be able and willing to render it into your language, in order that it may be legible to you; your approval or disapproval of it rests entirely with yourselves; we conceive he has done a good work.'" Morrison continued single-handed at his work till the summer of 1813,

1 Morrison's MS. in still in the library of the Morrison Education Society at Hongkong.

when he was joined by the Rev. W. Milne ; but through the jealousy of the Macao government, the latter was obliged to leave China a few days after his arrival. The two friends continued to prosecute the translation in conjunction, however, though not together, one being in China and the other at Malacca. Each taking separate books, and the whole passing finally under the revising hand of Morrison, the complete Bible was brought to a termination in 1822 ; but before it had issued from the press, Dr. Milne was called to his rest in June of the same year. The following year the complete work was in type, being the second entire version published within two years. This was the result of seventeen years of close application, severe toil, much anxiety, and believing prayer, on the part of the first Protestant missionary to China, in the face of extraordinary difficulties and discouragements ; having been ably assi ted in his arduous labour during part of the time by the zealous Milne, who eventually succumbed under the severity of the toil. Morrison gave due and accurate credit to Milne for the share he had in the work ; at the same time acknowledging the obligation he was under to the manuscript in the British Museum. Still he never gave this out as a perfect translation. It is indeed a remarkable production, as being chiefly the work of two European missionaries ; for the native assistants who aided them in their work, it is to be believed, were not of very high standing in the literary scale. Under the circumstances, we cannot too highly value the efforts of Morrison and Milne, while every Chinese scholar must be conscious of the deficiencies of their version. As might be expected, the attempt to render it literal, has degenerated into a style of composition intolerably unidiomatic, and disfigured by a profusion of barbarisms. It is, however, faithful ; and while it cannot be expected to rank among the literary productions of the empire, or to be acceptable to the fastidious taste of native scholars, yet we have reason to believe that it has been instrumental in shedding the light of divine truth on the minds of many of the votaries of paganism.

Soon after Morrison's return from England in 1826, he entered into correspondence regarding the version, with the Rev. W. H. Medhurst, who had been about ten years in the China Mission, the result of which was an invitation to the latter to attempt a new translation. But doubting at that time his own proficiency, Dr. Medhurst tells us, and conceiving that while Dr. Morrison lived, he would be the fittest person to set about the work, he gave up all idea of prosecuting the scheme any further,

until circumstances and necessities again forced the subject on his attention. The importance of a thorough revision and correction, however, seems to have struck Morrison with greater force, the longer he continued in the mission field, and with that candour and disinterested truthfulness which ever marked his course, he was ready to sanction any steps which might be taken for the improvement of the version. His son, John Robert Morrison, shewed great aptitude in acquiring the Chinese language ; and it was the expressed hope of the father that at some future day, he might revise Morrison and Milne's version of the Holy Scriptures.

A new and handsome edition of the Bible was issued about 1830 ; but, with the exception of a few slight verbal alterations, it does not appear to have undergone much emendation or revision. Notwithstanding the great encouragement which had been received, however, it was felt that much still remained to be done, in order to render the Word of Life into that free and intelligible style that we have it in every European language. The missionaries who were engaged in explaining the Scriptures to enquirers became painfully sensible of the difficulties they had to cope with, in bringing the Chinese to understand the sense of God's word. Their misapprehension of the true meaning, and the disposition they frequently manifested to put a wrong construction on what appeared to the missionaries the plainest passages, greatly disturbed the minds of their instructors. Some of these difficulties doubtless originated in the nature of the subject, and will continue to present themselves after the most perfect translation, until worn down by a more familiar acquaintance with Christian truth. But the chief drawback in the first translation was its excessively unidiomatical style, and the great and needless abundance of barbarisms.

In accordance with the wish above stated, Dr. Morrison proposed that his son should undertake the revision ; in which he was supported by the American Bible Society. That body had actually made provision for sustaining Mr. J. R. Morrison in the undertaking, and were determined to carry him through with it at any expense, when the death of Dr. Morrison entirely disarranged the plan ; for the son having succeeded to his father's office as Government Translator, had little time comparatively to devote to the object.

Practical measures were then adopted, however, for securing a new translation, and no one was better qualified for the work than Mr. Medhurst, who was at Canton at the time. Associated

with him in the work were the Rev. C. Gutzlaff, and the Rev. E. C. Bridgman; while Mr. J. R. Morrison devoted what time he could spare from his official duties to aid in perfecting the translation. With the assistance of several native scholars, these gentlemen completed the New Testament before the end of 1835; after which, by the concurrent advice of the brethren, it was put to press in three different places—Singapore, Serampore and Batavia.

The following year, circumstances having rendered it necessary that Mr. Medhurst should return to England, the joint labours of the translators were in a measure arrested; but not before they had reached the end of Joshua. It was then agreed that the several portions of the remainder should be allotted to Mr. Medhurst and Mr. Gutzlaff, who should transmit their respective portions to each other, for the inspection of all parties engaged.

While in England, Mr. Medhurst used all his influence with the London Missionary and Bible Societies, to get them to sanction a new translation; but the high respect entertained for the attainments of Morrison, together with the counter influence at work, had the effect of frustrating Mr. Medhurst's design; and the Directors, failing to appreciate the arguments used against the work of Morrison, refused to adopt the newly proposed version. In this they evidently fell into an error, for the work of Medhurst was a decided improvement on the former. The way was preparing however; the old version was being tested, and time was given for the formation of opinions; new sinologues were entering the field and acquiring qualifications, fitting them to engage in the work; while political events were about to open the way for the entrance of missionaries into China, and enable them to procure native assistance of a far higher standard than could be got in the Straits Settlements, or even at Canton under the old arrangement. By the efforts and enterprise of Mr. Gutzlaff, the new translation of the Old Testament was completed and published.

The zeal and devotion of the Rev. S. Dyer to the mission cause is well known, and from the time of his arrival in the Straits in 1827, he was a diligent student of the Chinese Bible, losing no opportunity of commending it to the Chinese within his reach. While engaged in the duties of his vocation, he was gradually led to see the imperfections of the existing version, and became more and more impressed with the importance and necessity of a thorough revision. Every object of pursuit with

him seems to have been brought to bear on this subject, and the productions of his pen shew the deep interest he took in it. In 1839, he had occasion to visit England, and while there took every opportunity of urging upon the Bible and Missionary Societies the necessity of a thorough revision; and was so far successful as to induce a feeling in favour of the long cherished scheme.

Soon after this a new field of enterprise was opened for the servants of Christ in China. By the treaties of 1843, five ports were made accessible to foreign residents, and the island of Hongkong was ceded to Great Britain. Most of the missionaries from the Straits removed to China; and, under the circumstances, a conference of the various denominations was resolved on, to take into consideration the state of the Chinese versions of the Scriptures.

Four Societies were represented, one English, two American and one local; and the result of six meetings was the allotment of the New Testament in five portions to be translated by the missionaries at the respective ports, subject to a final revision in concert.

In the summer of 1847, the work of the several local Committees being in an advanced stage, a general Committee of Delegates from the severals ports was convoked and met at the house of Dr. Medhurst at Shanghai in June. With the exception of a few months the same year, during which there was a cessation, the work was continued without intermission till the 24th July, 1850, when the New Testament was brought to a completion, and the labours of the Committee ended. Day after day the Committee met at the house of Dr. Medhurst, the President, aided by the co-operation of four or five native scholars, some of them men of superior qualifications. The proceedings are thus described by the Rev. W. C. Milne, a member of the Committee:—"Under the able and skilful leadership of this linguist, who was elected as Chairman, the translatorial engagements of the delegation were commenced upon the New Testament, following the 'Textus receptus,' in deference to the Bible Society's suggestion. Our sessions occurred daily, opened with reading a portion of the Sacred Scriptures and prayer, and extended from 10 o'clock A.M. to half-past 2 o'clock P.M. The method of proceeding in Committee was to consider verse by verse, word by word, allowing each individual opportunity to propose any alteration that he might deem desirable. The several members of the delegation had their native tutors with

them, three of whom continued with us for six years in our daily sittings, rendering most valuable assistance. Each day before adjournment, the portion of the Scripture to be considered at the next meeting was specified, and a rough draught of its translation offered by the Chairman, so that each member might duly examine and compare the same." [1]

A few days after its completion, it was formally given out, with the imprimatur of the Delegates, the Rt. Rev. Bishop Boone, Rev. Drs. Medhurst and Bridgman and the Revs. J. Stronach and W. C. Milne; the work of the Committee having been thus finally brought to a close; and the result of their labours, the admirable translation known as the Delegates' version, which has since been so extensively circulated.

Soon after this, another Committee of Delegates was assembled at Shanghai for the translation of the Old Testament; but after a few months a division took place among the members, and the result gave rise to two versions instead of one. One was carried through by the Revs. Dr. Medhurst, J. Stronach and W. C. Milne, and completed in 1853, uniform in style with the Delegates' version of the New Testament. Contemporaneously with the preceding, the Revs. Dr. Bridgman and Mr. Culbertson were engaged in a translation of the whole Bible, differing somewhat in style. With the exception of intervals, during which they each visited their native land, the work was continued till its completion in 1862; this being the fifth complete translation of the Bible into the Chinese language.

Dr. Marshman's translation of the Bible was specially used by the Baptist missionaries; but increasing dissatisfaction with the version induced the American Baptist Board of Foreign Missions to send out the Rev. Josiah Goddard, with a special view to carry through a new translation. Ill health and various missionary duties combined to retard the progress of his work. The New Testament was completed by him, and printed in 1853. The following year he died at Ningpo, while engaged in his labours on the Old Testament, the translation of which has since been carried on by the Rev. Dr. Dean, of Bangkok.

The Rev. T. H. Hudson, of Ningpo, has for many years been occupied with a revision of the New Testament, which has recently been brought to a completion and published.

The only other translation of the New Testament in the book style of which I am aware is that by the Russian Mission, published at Peking in 1864.

1 Life in China. pp 504, 505.

Besides the Old Testament, it may be mentioned that Gutzlaff published a modification of Medhurst's version of the New Testament, or rather the version upon which they had been working in concert. This went through some ten or more editions, being each time revised under the superintendence of Dr. Gutzlaff.

It was one of the earlier editions of this that was ultimately printed by the T'ae-p'ing rebels. At first they published it in its original purity, but in subsequent editions it was much altered by members of their own fraternity.

The Old Testament was partially published by them, but never completed I believe.

Next to the literary versions, the most important of the dialects is the Mandarin, as being the colloquial medium of a large proportion of the people of China. Scarcely had Dr. Medhurst completed his labours on the Old Testament, when he commenced a translation of the New Testament into the Mandarin language, in concert with the Rev. J. Stronach. This was first published in 1856.

A Committee has been engaged for the last three years in Peking on a new version into the Mandarin, suited more particularly to the northern part of China. Another year will probably see the completion of the work.

The whole New Testament has been published in the Ningpo dialect; and several editions of the New Testament in the Fuhchow Amoy dialects have been put through the press.

Detached portions of the Scriptures have also been published in several other dialects.

Such is a very summary outline of the stages by which Bible translation in China has reached its present state of perfection; and it is hazarding nothing to say that as a literary composition, and a faithful transcript of the original, it stands unsurpassed in the history of translations into Chinese.

We deem it a great thing to have a good version of the Scriptures, but this is not the ultimate aim. It is one thing to have the book, and another to be able to circulate it. Indispensable as is the former, the latter is the great object which Christian philanthropists have kept in view from the beginning; and for this end the various Bible Societies of Great Britain and America have contributed liberally their funds.

In the early days of the China Mission, the printing and circulation of the Scriptures, even on the borders of the empire, was a question of penalties, stripes and imprisonment; and it was

found necessary to remove to Malacca, or some place outside the empire, in order to carry on the printing to any great extent, The first tour made for the circulation of the Scriptures among the Chinese was by the Rev. W. Milne in 1814. On that occasion he visited Rhio, Banca, Java and the islands of the Malayan Archipelago, and distributed several hundred Testaments among the Chinese settlers. The work was carried on for years by the missionaries at the various stations, several of whom made special voyages in the interest of the British and Foreign Bible Society. But the importance of the operations assumed such a magnitude in the eyes of Dr. Morrison, that in 1824 he made an earnest request to the Society that a special Agent might be employed in promoting their interest in that quarter; a proposal which was cordially seconded by Sir Thomas Stamford Raffles, the Governor of Sumatra. Although the request was approved by the directors, the matter had to stand over for several years, till Mr. Lay went out as their Agent, and arrived at Macao towards the close of 1836. The difficulty of gaining access however to the mainland of China was such as entirely to cripple his efforts regarding that country, and after nearly three years spent in the Straits and among the islands chiefly, he returned to England. Events were progressing, however, towards the opening of the country. By the treaty of Nanking, five ports were made accesible and at each of these the representatives of Missionary Societies were established.

In 1854 a remarkable concurrence of events took place While the Christian public of England were celebrating the Jubilee of the British and Foreign Bible Society, news was arriving from China of the great revolutionary movement that was in progress. The fact that a powerful party, in successful revolt, was maintaining the cardinal points of the Christian faith, and actually printing and publishing the Christian Scriptures, was sufficient to draw forth the religious sympathy of Christians. At the period alluded to, when it was thought the country would speedily be thrown open to Christian teachers, the Rev. J. Angel' James, one of the oldest and warmest friends of the Bible Society, came forward with a proposal to raise a fund to supply China with *a million* copies of the New Testament. The call was warmly responded to, and the funds were raised without difficulty. A large portion of the million was printed, and native colporteurs were employed in vaarious parts of China, under the immediate direction of the missionaries; but the circulation did not advance so rapidly as had been expected.

In 1863, the British and Foreign Bible Society again adopted the plan of appointing a special Agent to take the charge of their affairs in China, where he arrived about the end of the year. Having already had some experience in circulating books among the people, he was impressed with the disadvantages of a gratuitous distribution, and felt that if the natives could be got to give a small price for the books, it would be beneficial in several respects. But the matter had to be tested, and while he was fully convinced of the importance of the principle of sale, he was by no means sure of success. A trial however soon decided the question, and it was found that the the principle of sale for a small sum was far more practicable than gratuitous distribution. Native colporteurs have been appointed at Peking, Tientsin, Kewkeang, Hankow, Shanghai, Fuhchow, Amoy, Hongkong, Canton and at several points in the interior of the province. Most of these natives travel over the country by themselves; but it has been found profitable sometimes to have Europeans accompanied by Chinese: and two or three have accordingly been engaged in this service. The object of the Society is to send the Scriptures to every corner of the empire, and keeping this in view, instead of mere desultory efforts, it has been the Agent's plan to go methodically over the country by means of his various employees, as far as the scheme is practicable, leaving no town, city or village, without an offer of the Scriptures. The price has been fixed so low as to place it within reach of almost the poorest to obtain at least a Gospel, if they cannot purchase a complete New Testament, and yet high enough to cut off the probability of people purchasing them for improper uses. We have thus an excellent means of testing how far the people really desire the books for their own sake; and after some four years' experience I have no hesitation in saying that there is a very general desire on the part of the people to obtain our books.

Thirteen[1] out of eighteen provinces have thus been visited by our agency. In some of these, our operations have as yet been very limited; in others, there are few cities or towns where the Scriptures have not been circulated. Of the 267 prefectures and departments into which the whole empire is divided, we have introduced our book into more than a third. In the provinces south of Chekiang, the selling system has scarcely been adopted, and my statistics from these parts are not very precise. But from Fuhkien northward, our circulation has been entirely by sale; and on that principle the New Testament has already been largely

1 Since this article was read to the meeting, the writer has made a tour through [illegible] provinces

distributed in more than three hundred walled cities, besides about 1200 towns and villages; in all, upwards of two hundred thousand volumes during the past four years.

These statements refer altogether to the agency of the British and Foreign Bible Society; but the result will be greatly augmented, if we consider the labours of the Rev. A. Williamson, the Agent of the National Bible Society of Scotland, whose appointment dates from the same period. Besides these, a number of colporteurs have been actively engaged in the service of the American Bible Society for some years past; and although I do not know the extent of their circulation, there is reason to believe that they have been earnest and diligent in the work.

By the general voice of Christendom, the Bible is acknowleged to be the Word of God. I believe that voice is not [illegible]. Entertaining such a belief, I rejoice in maintaining the [illegible] of our Society, which is to circulate the Bible without note or comment; and since the commencement of my agency, I have never distributed a page of other matter along with it. In [illegible] prohibiting the distribution of other books by those engaged in the service of the Society, we wish the Chinese to see that we do not place it on the same footing as tracts or other books: without depreciating other works, we wish them to understand that this is a book apart, and that we give it out as infallible—a predicate we refuse to any mere human composition. I believe the Bible [illegible] fitted by Him whose Word it is to raise mankind from the lowest depths, and that it is the right of every man and woman in the world to possess it. While by no means ignoring the efficacy and necessity of the Holy Spirit, to apply the truth to the heart and conscience, I yet believe there is a power inherent in the very words of Scripture; and that we may legitimately look for results from its perusal which no other book warrants us to expect. I believe in the value of dissemination a knowledge of the arts and sciences, and secular learning of every kind.—I believe in the progress, of civilization,—I believe in the advancement of commerce; but without the Word of God, I believe all these appliances will be powerless to raise the people in the social scale.

As Christians of all denominations hold the Bible to be the Word of God, when we meet together on this platform, we can happily lay aside denominational differences. Not only does this apply to the various bodies into which the Protestant Church is divided, but also to the Church of Rome and the Greek Church; for we all unite in this article of faith. This was remarkably illustrated at the late Paris Exhibition, where the Society opened

a store, for the distribution of its wares. Moreover we can commend the Bible to any intelligent Mohammedan, without offending his prejudices, if he is familiar with the Koran; for the Scriptures are there habitually acknowledged and tacitly approved These form a very numerous class of the Chinese population; and while it is easy to conceive how they might be irritated by mere polemic essays, it is a great advantage to have this common ground to meet them on.

The Chinese at large, as a people, are well able to appreciate our efforts in this direction; for it is no novelty with them to circulate books for the advancement of morality and religion. They are a reading people, and naturally anxious to obtain books. We merely take advantage of this inquisitive spirit, to put into their hands a book of inestimable value; and look to God to give his blessing on the transaction. So accustomed are they to meet with missionaries first, engaged in this work, that in some of the more distant regions, they unconsciously imbibe the notion that all foreigners come on the same errand; and hence a kindly feeling is generated, which only waits to be drawn out and cultivated, by the reciprocation of a genial bearing towards them. I do not ignore the difficulties of opening up new ground having had experience in that matter; but what I say is, that the tendency of our work is to conciliate the fears and apprehensions of a suspicious people; and thus while we are imparting to them what we conceive to be the greatest boon, we are actually the pioneers in opening up the country to foreign intercourse.

SECRET SOCIETIES IN CHINA.

It has been said that in a despotic empire, insurrections are the eruptions upon the surface of the body politic, which mark the working of humours within, and that they are the reforms of those governments, while banditti are the opposition party [1] That possessors of an arbitrary power like the rulers of China, whose policy it is to withhold from the people all participation in political authority, should cherish a distrust of popular assemblages, is but natural. That they do so is a fact, indications of which are apparent, in the vigilant system of *espionage* which has come to maturity under the present monarchy, in the edicts which are issued from time, to time and especially in the nicely graduated code of laws which have found a place on the statute book. The result of this policy, however, has been in some respects far from satisfactory, having tended to aggravate the evil it was proposed to suppress; for while public assemblies have been carefully kept down, secret societies have become numerous and threatening: these in their turn have called forth legislative acts of a more stringent character; and withal, the more severe the prohibitions, the more the secret associations seem to have grown and gathered strength. Some of these societies are said to be innocent in their object; others are decidedly immoral and vicious, being merely a shield for the members to practise, with impunity, crimes of the most revolting character; one if not more, exists with the avowed object of subverting the present dynasty.

One of the latter class which has several times played a conspicuous art on the page of history, the 白蓮教 *Peh leen Keaou*, "White water-lily sect" is apparently coeval with the present

1 *Chinese Repository*, Vol IV. p. 416.

dynasty, for we find in the 大清律例 *Ta-tsing leuh-le*, "Penal code of the Manchu dynasty," the section on "Magicians, Leaders of Sects, and Teachers of false Doctrines" gives the name of this, together with 彌勒佛教 *Me-lih fuh keaou*, "Sect of Maitreya Buddha" 明尊教 *Ming-tsun keaou*, "Sect of the intelligent and honourable," and 白雲宗 *Peh-yun tsung*, "White cloud institution:" the chiefs of which several associations are made liable to the penalty of strangulation, and the members to receive 1000 blows and be transported 3,000 *le*.

The existence of the above fraternity at the commencement of last century, and the jealous eye by which they were looked upon by the sovereign power, is shown in the fact that the *Peh-lèn keaou*, and 聞香教 *Wan-heang keaou*, "Fragrance-perceiving sect" are both proscribed in the Amplification of the 7th Text of the 聖諭 *Shung-yu*, "Sacred Edict," published by the emperor Yung-ching in 1734.

Aware of the existence of this body and their obviously hostile intentions, the ruling authorities must have felt their proximity to be a very thorn in the flesh; although no outbreak of a serious nature had taken place, until the rise of that insurrection which menaced the government at the beginning of the reign of Kea-k'ing, and kept the five provinces of Sze-chuen, Kan-suh, Shen-se, Hoo-peh and Hoo-nan in a state of war and anarchy for eight years in succession, but was at last put down by the imperial troops.

The sect received a temporary check in this suppression, but it was not by any means annihilated, for in 1812, a plot had been conceived by them for a movement on a grand scale, to begin with a rising in Honan, an attack upon the palace at Pe-king, and also upon the emperor Kea-k'ing himself, while returning from his summer excursion to Jehol. The life of the emperor was at this time saved, in consequence of the rain having detained him on the way; and the attack on the place by seventy of the sect proved unsuccessful, the future emperor, then Meen-ning having distinguished himself on the occasion, killing two of them with his own hand.

In has been said that from this time, the society changed its ame to that of 三合會 *San-ho hwuy*, "Triad society[1]," but this s probably a mistake, for although many of its members may ave sheltered themselves in this latter, from the relentless spirit f vengeance which Kea-k'ing ever after seems to have manifested owards them, and although they never after appear in any overt

1 *Chinese Repository*, Vol. IV. p. 420.

facts, yet we do occasionally hear of their existence, and even down to the end of his reign, we find this emperor oppressed with a suspicion of their rising. One of the last acts of his reign is but poorly adapted to illustrate the high sounding epithet of Benevolent, with which he was honoured after death. In his zeal for the destruction of every vestige of this sect, he caused a man to be put to death in 1819, who had been banished to the frontier when a child of four years old on account of his father's connexion with the body. This atrocity, it was said, was committed with the view of "cutting off a sprout of rebellion."[2]

The bitter hatred which was thus generated in the heart of Kea-k'ing was not confined to this sect, but extended itself to every kind of society or association not by law established, or at least sanctioned. Even the Roman Catholics had to suffer under the hand of persecution; many native Christians were pursued to the death, and a French missionary was called to seal his testimony with his blood in 1820.[3]

In the year 1821, a clause was inserted in the section on "False doctrines, etc.," in the Penal Code, to the effect that the leaders of the 白陽教 *Peh-yang keaou*, "White Bright sect," *Peh-leen keaou*, and 八卦教 *Pa-kwa keaou*, "Eight diagram sect," should be liable to immediate strangulation, and the members, according to the degrees of their guilt, be given to Mohammedan Begs as slaves, or transported; and further that for the 紅陽教 *Hung-yang keaou*, "Red Bright sect," and such other sects as are not in the habit of using spells, the members be transported to Woo-loo-muh-tsze.

After the *Peh-leen keaou*, the next in importance, and which seeems now to have succeeded the other in its influence, is the Triad Society mentioned above. This society is known by a number of other designations, such as 天地會 *T'een-te hwuy*, or 添弟教 *Teen-te hwuy*, "Heaven and Earth Society," 紅家 *Hung kea*, or 洪家 *Hung kea*, "The Hung family," 小刀會 *Seaou-taou hwuy*, "The Dagger society," etc.; but whether these are all synonymes, or names of different branches of the same society, is not very clear.

In the 18th volume of the *Chinese Repository* is a notice of the origin of this society, which gives a good deal of information respecting many things connected with them; but most of the narrative portion bears so much of an air of allegory with it, that one is apt to hesitate before receiving it as authentic history. In

2 *Indo-Chinese Gleaner*, Vol. II p. 230.

3 *Indo-Chinese Gleaner*, Vol. II. p 414.

that account we are told that the society took its rise in Fuh-kien, on the 25th day of the 5th month, 1674; the object of their compact being to avenge the murder of their brethren by the present dynasty. In 1736, they were dispersed into various parts of the empire, having previously agreed upon certain signs by which they might be known to each other, until the day of vengeance shall arrive, when they are all to march to Nanking, and establish the ancient Chinese dynasty upon the throne. Ever since the time of their dispersion, the scattered members have been bound together by a kind of Freemasonry, using certain private signals whereby to recognize each other, meeting together at nights when certain ceremonies are performed known only to the confederates, and initiating new members under the most solemn pledges. The 36 oaths taken by the novitiates, and the symbolical names of various parts of the rites are given in the article above alluded to, and to these we shall refer below. Dr. Gutzlaff considered this society so formidable in its character, that should it combine with the other political associations in existence, it would form a strong barrier against foreign encroachment.

In the Penal Code, under the Section on Rebellion, in the edition published in 1801, one of the clauses states that "All those vagabond and disorderly persons who have been known to assemble together, and commit robberies and other acts of violence, under the designation of the 'Heaven and Earth Society,' shall upon seizure and conviction, suffer death by being beheaded; and those who have been induced to accompany them, and aid and abet, shall suffer death by being strangled.[1]"

In 1810, a clause was inserted in the same section, stating that the lawless banditti of Fuh-kien and Kwang-tung are forming plots and have resuscitated the 天地會 T'ien-ti hwuy, "Triad Society," &c.

This body seems to have gained great strength during the reign of Kea-k'ing, and in 1817, Yuen-yuen, governor of Canton, who vigorously exerted himself for its suppression, succeeded in capturing from two to three thousand of its members.

In 1819, Woo, the lieutenant-governor of Hoo-nan, in a memorial to the throne, complains of the pernicious influence of the 添弟會 T'ien-ti hwuy, "Triad Society" of the Kwang provinces, stating that it had extended as far as 永州 Yung-chow in Hoo-nan, being known also by the names 擔子會 Tan-tsze hwuy, "Sons of Toil Society," and 情義會 Tsing-i hwuy "Equity of the feelings Society." In 1822, a memorial was sent up from the Board

1 Staunton's translation of the Penal Code, Appendix.

of Punishments, stating that one Wei Fung-jin of Yung-ngan Chow was at the head of a confederacy, with which several of the soldiers and officials, were connected, being united in brotherhood by the blood-drinking rite, and proposing that a special punishment should be appointed for soldiers and officials found guilty of this offence, being lighter in character than that of belonging to the Triad Society.

The following account by an eye-witness of one of the nocturnal meetings of the T'ien-ti Hwuy, in the neighbourhood of Singapore, is given by Abdullah . . . . a Malay, well known to some gentlemen now in Shanghai, and said to be thoroughly trustworthy in his statements. What he relates occurred about the year 1824. He says that anxiety to gain satisfactory information respecting the proceedings of the Society led him to ingratiate himself with a Chinaman, one of the members, who agreed to take him to the place of meeting and give him an opportuity of witnessing their proceediags. After describing his journey to the place by short cuts over stumps of trees, across swamps and through water, &c., arrived at his destination, he says,—"There were three large sheds, one of them was about 30 fathoms in length, and full of people. When we were close to this *Bangsal*,[1] my friend said, 'Mr. Abdullah keep very quiet, and assume an air of stupidity.' Soon about 20 dogs commenced to bark at us, I was afraid at seeing so many of them together, but my friend called to the people in the *bangsal*, some of whom came out, and quieted the dogs. The *bangsal* was surrounded with a ditch, about three fathoms wide, and opposite the doors there were drawbridges, so that they might remove the bridge, and prevent people coming over without leave. When my friend was observed, three men brought the bridge and placed it over the ditch, so that we passed over it. On arriving at the other side there were also two or three pit-falls, over which were placed marks, but if any came, who did not know these marks, they might fall into a pit. The pits were about three fathoms deep, over the top was a slight wicker frame, on which dry plantain leaves were spread, and over these sods were laid, so as to be exactly like the surrounding ground. Some people came and led us into the *bangsal*. Inside I saw hundreds of lamps on the right and left, with people smoking opium All round the *bangsal* there were heaps of sharpened stakes, and inside arms were arranged, the sharpened stakes were used for throwing at an enemy. There were also plenty of swords, and bucklers and sticks, a fathom long, sharpened at the end like a dart, which were resting against the wal in bundles.

[1] Malay word for a shed.

I asked my friend quietly, "Is this the place?" he said "Yes, this is one place, there are five or six others larger than this, and farther inland, but to-night the people will assemble here, as this is the place where new members are received, and Mr. Abdullah will have an opportunity of seeing the ceremony, as they have just got five whom they intend to initiate this evening, for the Hoeys of Singapore are very bold and daring in forcing people to join their society." I then asked, "Where shall we remain this evening?" He said, "I will get a place in the chamber of a friend, at one side of the *bangsal*."

In the evening a drum was beaten, the sound of which was heard at a great distance, and soon after, the people began to collect. In my opinion there were 500 or 600 people in the *bangsal* at one time, and, of these, there were not twenty who were not opium smokers. When they were all assembled, the noise in the *bangsal* was such as if people were fighting a battle. At this time I was taken to the chamber at the side, which had a curtain, and belonged to the secretary. I remained here very quietly, my friend brought some rice in a plantain leaf, a roast potato and two plantains. I ate in order to prevent me from being hungry during the night. In a short time my friend came, and said, "Sit here quietly, there is a hole through which you can see, and be very careful, as the people will soon be all collected." I asked him to come and sit with me, but he said, "Don't be afraid, I am an officer of the society, how can I be absent from the duty which brought me here? I will come every now and then to see you, but don't be alarmed as no one will dare to molest you." I said "Very well."

About 7 o'clock they had all arrived and commenced to eat and drink spirits, which they did with a noise like a battle. In about an hour this finished, when they commenced to play on drums &., the music of which was exceedingly loud. On this they all arranged themselves in order, sitting opposite the *datu* (idol), but I observed that their faces were as red as the *bunga rayah*, from drunkenness. Among them all there was one chief, who sat on a lofty chair, with two men standing at his right, and two at his left. After them came eight men, with drawn swords, who arranged themselves at the right and left; then came one man, who burned paper in front of the idol (sacrifice), after him came eight men, with drawn swords, who guarded a man with dishevelled hair, and without any upper garment, in fact he had only a pair of trowsers. This man came in front of the chief, and bowed down, till his head touched the ground, the armed men on the right and

left now advanced, shouting, and laid their swords on his neck, they remained silently in this position for a short time, when a man advanced to the candidates' side; the chief then spoke as follows in the Chinese language:—"Who are you, and from whence come you? Who are your father and mother? Are they still alive or are they dead?" These questions were explained to the candidate by the man who stood at his side, and were answered as follows:—"I am such a one, of such a country, and my father and mother are both dead," even if his father and mother were alive, he would be obliged to say they were dead, because no one whose father and mother are alive, can be admitted into the society, as the existence of all those is as if they were dead to the world and its ties. The chief then said, "Will you swear that your father and mother are dead?" He answered, "I will," and performed the oath, by burning paper in front of the idol, saying at the same time, "My father and mother are dead." The chief then said "What have you come here for? Answer "I wish to join the T'ien-te hwuy."

The chief then said "You are deceiving, your thoughts are not as your speech." Answer "I will swear that I am good in faith," "Then swear." The candidate then taking paper, burned it, while he repeated his assertion. The chief then said, "Are you acquainted with the rules of the society?" Answer "Yes, I understand that I am required to take an oath by drinking blood."

The chief then said something to which the following answer was made:—

"I promise not to divulge the secrets of this society to any one under penalty of death." The chief said, "Truly". Answer "Truly." A vessel was then brought, containing arrack and a little blood from each of the members of the society, and with a knife, was placed in front of the idol. The candidate then taking up the knife, made a slight cut in his finger, from which he allowed some blood to fall into the cup. The chief then said, "Drink in presence of *Datu* Peking." The candidate then drank a small cupful, on which the chief and all the confederates drank a little, each in his turn. The chief then said "To-morrow go to our Secretary, and ask him for a book, in that book you will find all our rules and secret signs; you will pay one dollar for it." The chief then rose, and himself raised the candidate from his prostrate position, and now being initiated, he can take his place among those who before would have considered him an enemy.

In this way four members were admitted, and during the ceremony, I wrote down on paper every thing which I saw going

on My friend now came to see me, and after having asked if I was satisfied, went away. After three or four had been admitted, they brought a man with his hands tied with a cord, he was placed in front of the chief, and ordered to prostrate himself, but he remained erect. A man then came and gave him ten or twenty blows with a bamboo, he was then asked if he would join the society, he remained silent; the question was repeated three or four times, without getting any answer. The chief made a sign to those who were armed with the drawn swords, they advanced and made a motion as if they were about to cut off his head, indeed, I thought he was killed, but the chief ordered them to desist, and again asked if he would become a member of the society, still he refused. The chief then ordered him to be stretched on the ground, and two men came and beat him on the back with bamboos. This beating frightened him greatly, but on being questioned again, he still refused, when the chief said "To-morrow morning let him be put to death." They confined him for that night, and the next morning he was killed, in consequence of his not wishing to join the society. In this way how many tens of people have been murdered. Unfortunate people were taken with violence, at night in town, and to increase the number of members, were forced to join the society; and if any of them dared to divulge the secrets, they would be put to death without mercy; they could not escape, as wherever they went, they would meet members of the society.

Each member when he enters gets a book, in which are written the rules and regulations and secret signs and marks of knowing each other, in eating, and by different ways of wearing clothes, so that when one arrives as a stranger in any country, he can easily make himself known to the brethren by these signs.

By the time the occurrences I have described above were finished, it was 2 o'clock in the morning; they then blew a horn, and the people separated, some went to smoke opium, some to sleep, and some went down to town to rob. My friend soon came to look for me, and, seeing me, asked if I was not asleep, I said, "No, I don't feel sleepy," but God alone knows how frightened I was. My friend sat down beside me, and explained every thing which had happened. He told me further that there were 200 men who had gone down to town in search of food, (to rob). When I heard this my fears increased, my heart palpitated, and I wished for day-light, so that I might leave this ill-omened place, where I remained in fears.

"Sure enough, on arriving in town, I heard that about 200

Chinese had come down last night to Kampong Glam, armed, with their faces blackened, and with tens of *dammar* torches, like a procession. They robbed the house of the Roman Catholic Padre. The Padre had no one in his house but the cook. The robbers divided, some watched in front, and some behind, while some entered the house. They found the Padre asleep, one man held his hands and feet, while two others placed their swords at his neck, and demanded the key of his box. The Padre pointed out the keys, they opened the box and took all his property, a quantity of money and his clothes. By the time they had finished, those on guard in the street blew their horn, when they all went away into the interior, except those who held the Padre, they remained with him till their companions had got off some distance, when they also left him.

After I returned I could not remain satisfied till I informed Government of what I had seen and heard. Accordingly I went to Mr. Crawfurd and told him everything as related above; when he heard me he was astonished, and said, "How could you think of exposing your life to such danger? It is a wonder you were not killed." I said, "If I had not done so, there would be no certain information, as there are different accounts of the T'ien-Te Hwuy, but now, having myself seen things, there can be no mistake." He said, "That is very true, it is exactly the idea of Europeans." He then said, "And so there was a robbery last night, at the Roman Catholic Padre's house, in Kampong Gram." I said, "Yes I heard so, but how can you remain quiet thus, the next time your own house will be attacked." He said, "That is true, but I think the road is too difficult to send people to catch the robbers, and on that account I remain quiet, but I will send a constable and some peons to look out for them." I said, "That is right, if you remain quiet, they will become bolder." I then made my compliments and left him, he went to the Police Office, and I went home. Afterwards in the evening I heard that Mr. Crawfurd had ordered two constables with twelve peons, armed with swords, muskets, pistols, and some of them with their krisses, to go into the interior, to look for traces of the robbery, and, if possible, to recover the Padre's property. They started, and on arriving at the house half way, where I had stopped to refresh, they found a Chinaman just awakened, with his face blackened with ashes, and who was just going down to wash the ashes off, they took him into custody and brought him to town. When he was brought up at the Police Office, he pretended to be dumb and refused to answer any question;

accordingly, as it was late in the afternoon, he was remanded and sent to the prison at Teluk Ayer.

At about 2 o'clock the next morning, his friends, to the number of 200 or 300, came down armed, broke the prison and released him. Some of the rioters watched at the door, others in the streets. All the peons who were on guard ran away, each to save his own life. The Constable in charge escaped through one of the upper windows. The prison was broken, and the prisoner was carried away by his friends. In the mean time, the Constable and peons went to the Police Office, and on the roll being called, not one was missing. Now for the first time, we heard of a night-watch being set in the streets of Singapore. After this news had been abroad two or three days, the T'ien-ti Hwuy again came down and attacked the Dhoby Ghaut and Campong Glam. There were 200 or 300 of them with dammar and bamboo torches, and with arms. When the peon who was stationed there saw this state of affairs he ran off, and about 30 or 40 of the robbers with arms, were set to watch the ends of the streets, and the rest commenced to break open the doors of the houses, and collect the property of the Dhobies, the clothes entrusted to the Dhobies to wash were also taken. The owners of the houses were tied up to a post, and made to give up the keys of their boxes, and all the property worth taking was carried off, and not one of the neighbours dared to open the doors of their houses ; to see what the noise was about. One door was opened but two of the man's fingers were chopped off, and he quickly shut the door, and kept himself quiet in fear. The robbers chose certain houses, some they passed over, and indeed they did as they pleased. In this way matters remained ; sometimes every night, sometimes every other night, robberies were committed, till in about a week, the gun which was fired at 8 P.M., and 5 A.M. every day was lost. It disappeared in a wonderful way. There was a sepoy, armed with a musket and regularly relieved, placed to guard it. The gun, sepoy and musket were lost and have never till this day been heard of. Many were of opinion that this was also the work of the Chinese T'ien-ti Hwuy.

About a fortnight after, there was a large Siamese junk, which was sailing into Singapore harbour but as there was a strong head wind, the junk was anchored outside at Tanjong Katong. One night the T'ien-ti Hwuy came in great numbers in boats and boarded the junk ; they attacked and killed many of the crew, and the rest jumped overboard. The pirates then collected all the portable things, and loaded their boats as deeply

as possible with them, and set off home. I shall not enlarge further on the conduct of the Chinese T'ien ti Hwuy in Singapore, they were exceedingly licentious, and did as they pleased, without regard to decency or civilized manners.

Journal of the Indian Archipelago, September, 1852.

The above extract is translated from the Malay by T. Braddell, Esq.

In 1829, a censor memorialized the emperor, stating that the numbers of the Triad Society in Kiang-si, were such as to intimidate the authorities in the execution of justice; whereupon his majesty ordered the military to be employed for their suppression.[1] During the former part of the reign of Taou-kwang, the members of this society were permitted to increase their numbers to a great extent in the southern provinces; and by the unchecked depredations and continued annoyances which they practised, at last roused the 猺 Yaou, a wild mountain race, living on the Borders of Kwang si and Hoo-nan, who goaded by their insults rose *en masse* and killed upwards of twenty of the fraternity in 1831. This led to an insurrection of the Yaou, which was suppressed after a few months campaign, many of the imperial troops and officials being found to be connected with the association.[2] Woo, the lieutenant-governor of Hoo-nan, memorializing the emperor on the subject, asserts that there are none of the Triad Society among the rebels. Taou-kwang, however, seems a little distrustful on this point, and replies with his vermillion pencil :— "How do you certainly know that there are none of the Triad Society among them? Hereafter when they are annihilated, and it is found out that there were Triad banditti among them, what will you do? Where will you hide yourself on the earth?"[3] The society although existing with the avowed object of overthrowing the present Chinese dynasty seems to lose none of its energy or independence among the members who settle in foreign countries, and according to the testimony of Dr. Gutzlaff in 1831, when all the other Chinese residents in Siam were submitting with the most abject servility to the oppression of their Siamese rulers, the members of the Triad Society alone were able to make a stand against their exorbitant demands.[1] The remarks of Dr. G.; however, in this and other places are scarcely in keeping with his remarks on the Society in his "Life of Taou-kwang," he says there speaking of this period,—"The T'ien-ti Hwuy, or Triad Society,

1 *Chinese Repository*, Vol. IV. p. 424.

2 聖武紀

3 *Chinese Repository* Vol. 1. p. 30.

to appear patriotic, would still talk about the usurpation of the Manchoos, and incite the people to shake off the yoke. These efforts, however, were very feeble, the plans badly concerted, and amongst all their political professions, there lurked always a strong desire to rob; vagabonds like these, therefore, were very soon put down, and the government recovered its ascendancy."

In 1831, the emperor ordered proclamations to be issued, offering free pardon to all who would recant, and give up their connexion with this society.

At Malacca and the neighbourhood of the Straits, where Chinese settlers are numerous, the members of this body are under still less restraint in their lawless proceedings than in China, and instances of oppression by them are frequently brought to light. A case of the kind which occurred in 1833, is given in the *Chinese Repository* for that year, where a native of Fuh-kien having accumulated a little money by trade in Malacca, was so frequently assailed by insult and violence from the members of the Triad society, who demanded loans of money and extorted credit, that he was obliged to quit the scene of persecution and return to his native land. The following account of the state of Chinese society in the Straits is given in the *Chinese Repository* for September 1833, on the evidence of a Chinese who had just returned to his native land. "Secret societies have risen up in all the settlements. But they are all emanations of the *Triad Society*. They have secret signs and dark phrases—a circumstance that identifies them all with that odious fraternity. Of late, there has arisen a very large stock of this society, consisting of a great many men, extremely powerful and violent. They have assumed the names of the *Hai-shan Hwuy*, "the Sea and land society; and the *I-hing hwuy*, "the Righteous rising society." These two associations are scattered over all the settlements; and they all obey the order and restrictions of the heads of their respective societies, whom they call "*the great brother*." This stock is divided into four, eight, or twelve great stems, as the case may be, and from these stems there issue scores of branches. Every stem and every branch has its headman, who is designated senior brother, Emigrants from the hills of China are called new-comers. As soon as they arrive at any settlement, the brotherhood sends persons to invite them to join the confederacy. If they decline, they are forthwith persecuted. However, the two above-named societies often wrangle, and if you belong to the one and not to the other, you are equally persecuted. Chinese coming from Bengal with a few hundred dollars, or a few thousands which they may have saved, are inveigled by these banditti to go to the hills and enjoy themselves in pleasure When the strangers are brought to a solitary

place, they are probably destroyed, and their property plundered. Thus half goes to the society, and the other goes to the captors. Thus it has often occurred, and the local magistrates have got some slight tidings of it, and have sent to seize the offenders. But the customs of the settlement are defective. They require witnesses before they *dare* convict of guilt. They *dare* not urge the question by torture; so that having one or two witnesses on one side, and a great multitude of sureties for the accused on the other side, they will never convict. But the new comer is a solitary individual, and if his native townsmen feel for him and desire to redress his grievances, one person alone goes to the magistrate to lodge a a complaint, and hundreds or thousands of the brotherhood will come forward to be surety for the accused. Often have the local magistrates been thus deceived and hoodwinked. And afterwards those Chinese who had indicated feeling on behalf of the stranger, have been forced to leave the settlement speedily, to avoid the secret malice of the brotherhood." The editor adds,—"Of the truth of the above allegations we have no doubt. These brotherhoods do not seem to aim at taking the external form of a government; but to avail themselves of the substance. They wish to be the 'gentlemen regulators' for all poor Chinese, and to leave the gentlemen European governors and residents, in quiet possession of their titles and salaries. For the amount of horrible crime which such 'secret societies' may commit, we refer our readers to a paper in the *Asiatic Journal* for May 1833, on 'the Thugs of the Doaab.' The Chinese Triad Society does not seem equal to them in cold-blooded murder; but they also, now and then, carry off to the hills those who show them '*disrespect*,' and there flog them to death."

A branch of the Triad society was known to exist in Macao, by the discovery of a nightly meeting of them in the burial ground belonging to the East India Company, where, in their haste to escape, they left behind them documents which fully proved the treasonable nature of their intentions.

In a memorial presented to the emperor in 1838, it is said,—"Bands of men combine and join together, under the designations of Heaven and Earth Brotherhoods, Triad societies and such like. They carry off persons in order to extort ransoms from them; they falsely assume the character of policemen; they clandestinely build fast pulling boats, professedly to guard the fields of grain, and these they man with a crew of from ten to twenty people, who cruise along the rivers, violently plundering the boats of travellers as they pass to and fro, or forcibly carrying off the wives and daughters of the egg-boat people. The inhabitants of the villages and hamlets fear these robbers as they would tigers, and do not offer them

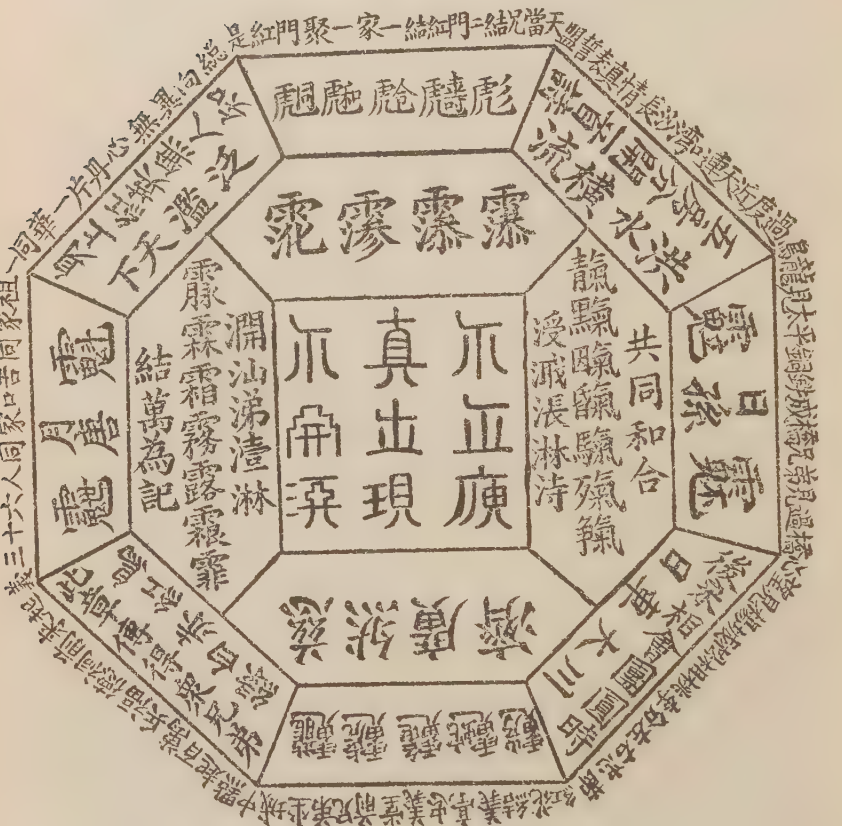
any resistance, lest they should draw down their resentment. The husbandman, when he has received a field to plant and prepare for culture, must take the precaution of paying these robbers a charge, which is called procuring an indemnity,—else, as soon as the crop is ripe, it is plundered and the whole field laid bare. In the precincts of the metropolis, where their contiguity to the civil and military tribunals prevents them from committing violent depredations in open day they set fire to places during the night, their aim being, under pretence, during the conflagration, of saving and defending, to avail themselves of opportunities to plunder and carry off. Hence of late years, calamitous fires have greatly increased in frequency."[1]

In 1841, Fung Tsan-heun, Censor for Hu-kwang, memorialized the emperor in a doleful strain respecting the associated banditti, who were spreading in all directions. He says, "these confederacies have been for many years linked together, extending throughout five or six provinces, and are known as the 三合會 *San-ho hwuy*, Triad society; their numbers cannot be ascertained, but they are divided into five lodges; Fuh-kien is the grand lodge; Kwang-tung is the second; Yun-nan is the third; Hu kwang is the fourth; and Che-kiang is the fifth; every lodge has its headman or Arch; their standards are distinguished by the five colors; the members of the society have a pass-word, and each has in his possession a seal; although the members may not have seen each other before, yet on hearing the pass-word, they recognize each other as brethren; they have a mutual participation of property, and hold by each other in time of difficulty; respectable people who do not join them are never safe, so that the number of their adherents has become formidable. Thus they have secretly spread without having any fixed retreat, soldiers, civilians and officials all sympathizing with them. Perchance at some given signal, the whole six provinces may respond in concert, when there will be calamity of no slight magnitude. I would accordingly request your majesty to give particular orders to the various district magistrates in the said provinces, that they may adopt preventive measures, secretly investigate and rigorously apprehend and destroy the offenders. I have obtained a copy of their seal, which, I dare not withold from your majesty, and have had it carefully retraced, and it is forwarded with this memorial for evidence &c."

1 *Martin's China*, Vol. I p. 166.

(*See Seal and Description in the following pages.*)

長房在福建烏旅
彪姚必成
二房在廣東紅旅
標洪太歲
三房在雲南赤旅
越吳天成
四房在湘廣白旅
廌林永超
五房在浙江綠旅
廌李色第


彪驫彪彪驫
霢霢霧霢
瀑流横水洪
共同和合
瀑瀑瀑瀑瀑瀑瀑瀑
瀑瀑瀑瀑瀑瀑瀑瀑
瀑瀑瀑瀑瀑瀑瀑瀑

DESCRIPTION OF THE SEAL

The 10 lines at the top.

The chief lodge, in Fuh-kien, with the black flag.
SAN *Yaou Pi-ching.*
Second lodge, in Kwang-tung, with the red flag.
SHOW *Hung Tai-suy,*
Third lodge, in Yun-nan, with the carnation flag.
HO *Woo Tien-ching.*
Fourth lodge, in Hu-kwang, with the white flag
HO *Lin Yung-chaou.*
Fifth lodge, in Che-kiang, with the green flag.
*TUNG †*Li Seh-ti.*

Inscription round the outside of the seal

HEAVEN.

First firmly connect the house of Hung, and next secure the brethren.

Before heaven I take the oath, declaring these to be my true feelings:

(1)The winding entrance to Chang sha is nearly connected with heaven:

* All the initial words here represent composite characters, unknown in Chinese literature except the first, each having the character for a "tiger" combined with some other. Although the upper character, when standing by itself, *yaou*, admits of a natural explanation, yet it is probable that here also the tiger character is to be discarded, which will leave the phonetic *sun*, to which it is difficult to find a clue. The next, on the same principle, probably alludes to the Show-lin monastery on the Kiulien hills, in the department of Fuh-chow in Fuh-Kien, the original residence of the priests who first gave rise to the association. The three lower characters without the auxiliary "tiger" will read, "United in a bond of harmony."

† After the Show-lin priests left Chang-sha, they fled for retreat to the Ling-woug temple, and while living there, they were visited by five horse-dealers named respectively, Woo, Hung, Li, Taou, and Lin, who entered into a mutual oath with the five priests, to hold by each other in life or death. It is said in the *Chinese Repository*, vol. 18,p. 291, that these five horse-dealers were made heads of five junior lodges in Sze-chuen, Kwei-chow, Kiang-nan Yun-nan and Ho-nan There is sufficient coincidence in these five names with the five heads of lodges on the seal, the only difference being Taou in this, instead of Yaou on the other. But only one out of the five lodges corresponds, viz., Yun-nan, while the other four lodges on the seal are mentioned as among the five senior lodges presided over by the five Show-lin priests. Possibly these may be liable to variation according to time or circumstances

(1) 長沙灣口 "The winding entrance to Chang-shà,"—The priests of the Show-lin monastery in Fuh-kien being persecuted by the rulers of the province, determined to oppose them; they thereupon killed one Kien Tsin. Instantly the flames burst on every side of the monastery late in the night, while the priests were asleep, and when no helping hand could reach them, by which most

Crossing over the Black Dragon ford, T'ae-p'ing appears to view:

At the bridge constructed of brass and iron, the brethren are recognized.

(2)Crossing the bridge and mentally looking upwards, the city of (3)Yang is seen;

The right and left being skirted by the (4)Sung, Peh, Taou and Li respectively;

Setting forth fidelity and constancy, while the (5)red blossoms adorn the Pavilion of confederate righteousness;

Before the Hall of fidelity and righteousness, the brethren are all seated;

In the city, the troops muster a hundred myriads strong:

Before the Chapel of felicitous virtue, they come and raise the righteous standard;

(6)Thirty-six is the number of united branches of the family;

The ancestors of our united family will combine the Flowery race in one:

With coincidence of views and sincerity of heart, diversity of purpose is unknown;

But all the members of the Hung fraternity assemble as a single family.

of the brethren perished, only eighteen men being scarcely saved. These taking the seal and sword, repaired to a back pavilion, and knelt before the altar of Buddha, begging him to rescue them. He straightway ordered Chu-kai to descend and transform himself into two roads, whereby he could save these men. They thus went out of the monastery, and saw one Ma Urh-fuh standing amongst the troops and said, "This is the man who served as guide to the troops to come and set fire to our monastery. He has this day revenged his hatred by acting as guide" They then struck him dead, on which the troops became furious; but the priests being few, they were no match, though they fought till dawn; they however escaped to Chang-sha mart in Hu-kwang, where thirteen of them afterwards died by reason of hunger and the hardships of the season.—*Chinese Repository*, vol. 18, p. 289.)

(2) 過橋 "Crossing the bridge."—This bridge is formed of swords, either laid between two tables (an end resting on each) or else set up on the hilts, and meeting at the point; or held up in the hands of two ranks of members, with the points meeting in form of an arch. The persons who receive the oath, take it under this bridge, which is called—"passing, or crossing the bridge" The *yih kó*, or chief ruling brother, sits at the head of this steel bridge (or each with a drawn sword), reads the articles of the oath, to every one of which, an affirmative response is given by the new member, after which he cuts off the head of a cock, which is the usual form of a Chinese oath, intimating—"thus let perish all who divulge the secret."—(*Dr. Milne. Asiatic transactions*, vol. 1, p. 243.)

(3) 心望見陽城 "Mentally looking upwards, the city of Yang is seen."—The lodge is represented under the similitude of an encampment, called the Muh-yang city, said to be the name of a city in the Ming dynasty.—(*Chinese Repository*, vol. 18, p. 288.)—Probably Nanking.

(4) 松柏桃李 "Sung, Peh, Taou, Li."—These are the names of four trees, the fir, cypress, peach, and pear; but here they may represent so many branches of the fraternity.

(5) 紅花 "Red flowers" may also be read the "blossoms of Hung."—The Red flower pavilion is the innermost part of the lodge. (*Chinese Repository*, vol. 18, p. 288.)

(6) There may possibly be some allusion here to the thirty-six oaths administered to the members, which are given in the *Chinese Repository*, vol. 18, p. 284.

The upper of the eight compartments contains the same five composite characters that are used as initials under the respective lodges, viz.,—SAN SHOW HO HO TUNG.

The lower compartment contains five other strange characters, still more complex in their structure than the preceding, the auxiliary part being formed by the character for *rain*, with that for *a spirit of the inferior order*, under it: the annexed characters are LUNG a dragon, HU a tiger, KWEI a tortoise, SHAY a serpent, and HWUY an assemblage.

In the right side compartment, there is little doubt about the two outside characters; they have the same auxiliary as those in the lower compartment, the lower one having the character 木 annexed, which is a well known cypher for 十八 or eighteen; the principle is obvious; this represents the number of the years of the reign of Shun-che, the first emperor of the present dynasty. The upper one has the character 立 annexed, which being dissected, gives 六一 or sixty-one, the term of Kang-he's reign. In the left side compartment are also two outside characters with the same auxiliary, the upper one having 斗 annexed, an analysis of which gives 十三 or thirteen, being the years of Yungching's reign; the lower one has 世 annexed, which being reduced on the same principle, gives 卅卅 twice thirty, or sixty, being the length of Kien-lung's reign. In the middle of the right and left hand compartments, are two characters each; the two outer ones, "Sun" and "Moon" seem to be intended as the component parts of the character 明 *ming* for the Ming dynasty; the inner one on the right 孫 *sun* "descendants" may refer to 福王 Fuh Wang and 六安王 Luh-ngan Wang, two of the descendants of the Ming imperial family, who were successively, chosen by the adherents of the dynasty, and put to death by the Tartars. The inner character on the left 唐 *T'ang* may allude to 唐王 T'ang Wang a subsequent aspirant to the Ming succession in Fuh-kien and Kiang-si. (See *North-China Herald*, Nos. 90,101,122.)

In each of the four diagonal compartments are two lines, one longitudinal, the other horizontal. Beginning with the outside or longitudinal lines, taking first the upper right, and then the left, these being both read from bottom to top; next the lower left, and last the right, both these being read from top to bottom, we have the following stanza;—

The five lodges taking their respective parts, all engage in full chorus.
Bearing on their persons the emblem of Hung, which is unknown to others;
This tradition is handed down to the whole host of brethren,
And every future meeting forms an occasion of cementing their alliance.

Taking the four diagonal compartments in the same order for the inner or horizontal lines, we have the following verso

The waters of (7) Hung flowing abroad,
Overflow and inundate the whole empire;
The black, red, carnation, white and green standards,
Like a torrent enlarge, till they roll over the (8) sun,

In the four compartments inside the octagon, the upper one contains four composite characters unknown in literature, the auxiliary character for "rain" being placed above each, and the character for "water" at the side. It is a common device with the Taouists to write out inscriptions, each character being covered like these; but in the present instance, there is probably quite an independent origin. Taking the four lower right-hand portions as separate characters, they will bear the following meaning —

The Hung blossoms of the three great ones (or Triad). (9)

In the lower compartment, are four characters signifying:—

Let affection pervade, and extend assistance to the needy.

The right and left compartments have each three lines. The outer lines respectively give the following couplet:—

United together a harmonious band,
Myriad's the signal word by which we stand.

The two inner lines may be read as follows, taking the water radical of each character as merely a characteristic of the 洪 society and extra from the meaning:—

Reaching the first forest on the hill,
We seize our weapons at the Chang-lin monastery.

The right centre line consists of seven composite characters, omitting the auxiliary 氣 as before, the first four may be read,—

The marriage of heaven and earth—

It is difficult to give any intelligible meaning to the other three, *ma*, *tai*, *tsang*, literally "horse," "evil," and "to strive."

The left centre line consists of seven composites of the character for "rain," all admitting of a natural explanation except the sixth, which is the character for stem placed under rain. The other six are,—

Small rain, heavy showers, hoar frost, fog, dew, sleet.

Omitting the head character, the explanation is still more difficult.

The characters in the centre square are in some fantastic form, apparently arbitrary in their structure. The meaning probably is,—

Celestial blood has been shed;
When the true lord appears,
The celestial dynasty will be established,
and Hung exalted

(7) This Hung is the character for an *inundation*, evidently used as being in keeping with the meaning of the verse, though there can be no doubt it is intended secretly for the same as the Hung on the outer line, which literally means *red*, but which is used here as a proper name.

(8) Sometimes used figuratively for the emperor.

(9) Since the capture of Shanghai by the Triad Society, these four characters written on red paper have been pasted on the doors of a great number of the houses.

We seldom hear any aggressions upon foreigners by this body; but an instance may be referred to, in the burning of the British Factory at Canton, in December 1842; there being strong grounds for believing that it was the work of some incendiaries belonging to the Triad society.

In 1845, indications of internal disorder wore a threatening aspect at Chaou chow foo in Kwang-tung province, where the Triad society presented such a formidable opposition to the authorities, that it was necessary to send for a strong military force from Canton, before they could be suppressed, and then altogether at the cost of about eight hundred lives, while in other parts of the province, they still continued to carry arms in utter defiance of the government authorities.

About the same time, they were exciting troubles at Heang-shan, between Canton and Macao.

Our own colony of Hongkong does not seem to have been free from these vexatious residents, a lodge having been established in the town of Victoria; and that they did not receive much more favour at the hands of our authorities than under their own government, is clear from the following ordinance, passed at the beginning of 1845:—

"By his excellency John Francis Davis, Esq., Governor and Commander-inchief of the colony of Hongkong and its dependencies.

"Whereas the Triad Society and other secret societies prevalent in China exist among the inhabitants of the island of Hongkong, and whereas these associations have objects in view which are incompatible with the maintenance of good order and constituted authority, and with the security of life and property, and afford by means of a secret agency increased facilities for the commission of crime and for the escape of offenders:

"Be it therefore enacted and ordained by the Governor of Hongkong with the advice of the Legislative Council therefore, that from and after the passing of this ordinance, if any person or persons being of Chinese origin in the said island or its dependencies shall be a member or members of the Triad Society or other secret societies as aforesaid, he she or they shall in consequence thereof be guilty of felony, and being duly convicted thereof shall be imprisoned for any term not exceeding three years, with or without hard labour, and at the expiration of such term of imprisonment, that such person shall be marked on the right cheek in the manner usual in the case of military deserters and be expelled from the said island."

In March 1846, a formidable demonstration was made by the body in Singapore, on occasion of the death of their chief, seven thousand of the members having assembled to escort the funeral through the town, to the terror of the peaceable inhabitants, and who even ventured to menace the military in open day-light.

The recent movements of the association under the designation of the Dagger Society, at Amoy and the neighbourhood, are still fresh in the memory; and although the secret influences in operation are so imperfectly disclosed as yet, all the information we have received from that quarter, goes to identify them with the original Triad Society. It appears that on May 18th this

year, after the inhabitants had been kept in suspense and anticipation for several days, the town of Amoy was attacked and fell an easy prize to about three thousand of this body, who seem to have met with fully more sympathy than opposition, both from the inhabitants and the military. Having become masters of the town, the several mandarins were allowed to make their escape, and many of the inhabitants joined the ranks of the insurgents. Foreigners resident at the port were nominally taken under their special protection, and a considerable effort seems to have been made by these newly constituted authorities to preserve some degree of order, and not altogether without effect. Later news from that port chiefly tends to show the imbecility of the imperial troops, and the probability that the insurgents will be able for a time at least to retain their position; although it does not appear that they have organized any regular form of government.

(*See Seal and Description on next page.*)

The four lines outside the square.

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[1] Chung-le fanning the sun, heads the family of immortals.
Tih Le-kwae with his gourd emiting endless pure smoke.
Tung-pin with his sword suspended high in vacancy.
Tsae-ho holds a flower basket in one hand.
Chang-koo the veteran practises the ancient doctrines.
Seang-tsze plays on a single flute.
Duke Tsaou Kwo-kew has a double jade talisman.
Sien-koo stands at pleasure on the metal bridge.

1 These are the names of the 八仙 *Pa sien* Eight immortals, famous in Chinese mythology.

The characters in the four angles.

FAITHFUL AT HEART, AND JUST IN PRINCIPLE.

In the outer octagon, the centre character at the top is "Heaven," that at the bottom "Earth," at the right side "Sun," at the left side "Moon." The four intermediate portions make four lines of a stanza; taking the upper left, the lower right, lower left and upper right in succession, each line beginning with the right-hand character next the left, then second right, second left, and so on closing up to the centre, gives the four lines as follow :—

Five men each taking his part in the chorus.
Reciprocally presenting on their persons the secret badge of Hung.
This being communicated to the whole host of brethren.
At every future recognition, the bond of alliance becomes more firm.

Within the second octagon line, the centre character at the top is *Wan* a "myriad," and two on the right and left of it respectively signify a "thousand changes" and a "thousand transformations." The four characters down each side are difficult of explanation. The nearest sense we can come at may be :—

Investigating the existing corruptions,
We find the supreme power is opposed to Hung.

The lower line is the same five characters that are given at the top of the Hu-kwang seal, but placed in a different order commencing from the centre, and taking a character alternately right and left, giving as before, SAN SHOW HO HO TUNG.

Above the centre square are two characters signifying "Prince of the Family."

The two lines on the right and left side of the inner square give :—

When Hung with Hung in harmony combines.
The watchword "Myriad" passes through the lines.

The character at the bottom of the square *Peaou* may mean "dispersed," in allusion to the present condition of the society.

The centre character is HUNA.

Since the above was written, the inhabitants of Shanghai have been called to witness another, and probably one of the most remarkable demonstrations in the history of the society. The capture of the city however was not an unforeseen event. For several weeks or even months previously, the pacific natives of this district had observed, not without suspicion and alarm, the successive and numerous arrivals of Fuh-kien and Canton men, without any ostensible object in view. Swords, pikes, and other military weapons were forthwith in demand; the *Seaou-taou hwuy* or Dagger Society became an object of general observation, while some of the members shielding themselves under the security

afforded by their confederate strength, gave way to the commission of delinquencies and outrages, which rendered them objects of dread to the peaceable inhabitants. To such lengths indeed had these proceeded and with such openness, that the authorities seem to have felt themselves compelled to take some notice of them, although no effective measures were taken to suppress the body or to prevent the rising which was daily anticipated. On the 10th of August, the Taou-tai issued an edict with special reference to the plans which were then being secretly concocted by the Dagger society, and offering a reward for the apprehension of Le, who has since the capture of the city, been recognized as second in power, with the title of *Too-tuh* "Commander general."[1] The next day a semi-poetical notice by the Che-hien was placarded in various parts of the city, calling on the people to unite and raise a volunter police force for self-preservation. Several men were apprehended and taken before the city magistrate, and in one or two instances, torture was resorted to, but although those in custody were known to be members of the society, most of them were released with little or no punishment, while the unfortunate Che-hien afterwards came to an untimely end, by the hand of one of those whom he had submitted to the torture, generally known by the nickname of Seau-kin tsze.

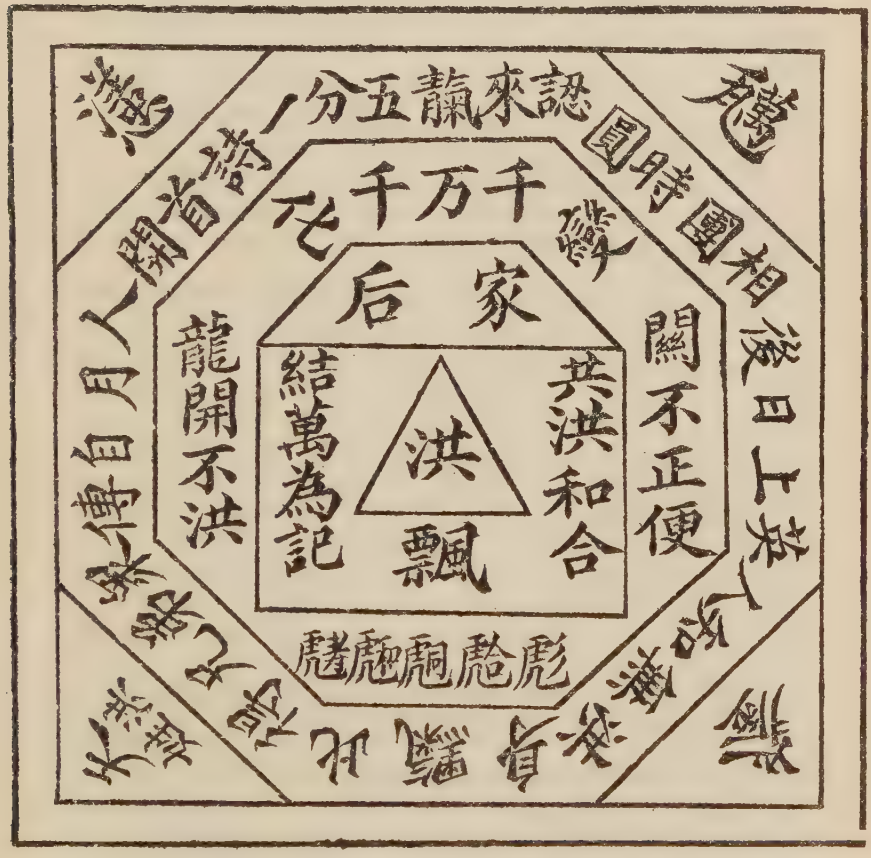
During the two weeks following, the Society had been active in maturing its plans and arranging preliminaries, and having in a great degree thrown off the secresy of their proceedings, organized themselves into a formidable corps, ostensibly for the defence of the city, after which they came boldly forward with an appeal to the Taou-tai signed Le by Seen-yun of the Fuh-kien lodge, Tan Kung of the Canton lodge, Ko Wan-che of the Chaou-chow lodge, Le Shaou-he of the Kea-ying lodge, Chang Kwei of the Ningpo lodge, and Pwan E-kwoh of the Shanghai lodge, to sanction their proceedings, and to furnish the funds necessary for their maintenance, estimated at 2,100 dollars monthly, besides the purchase of two Canton long-boats, military weapons, &c., &c. Their demands were virtually acceded to, and their various propositions were published on the city walls in a document issued by the Che-hien, on the 31st of August. Two days later a notice appeared from the same authority, respecting the danger to be apprehended from the insecure condition of the various city and ward gates, and pressing on the inhabitants the necessity of vigil-

1 Shorly after the capture of the city, this Le made his escape to Amoy, rumour says with a large sum of money, but whether to carry out the objects of the brotherhood, or to retire from the struggle in the enjoyment of his share of the booty, is not generally known.

ance in employing their efforts to detect and arrest every appearance of treachery. The 7th of September having been considered a day propitious for the execution of their great object, all the members were on the alert by early dawn, and while the authorities were engaged in the sacrifice to Confucius, the residences of the several mandarins were simultaneously attacked and given up to spoliation, the resistance being of the feeblest character; most of the government officials being already connected with the Society, had on the given signal put on the red riband as the distinctive badge of the fraternity. The Che-hien made some show of resistance, but being single-handed, was immediately stabbed, and his body left publicly exposed for several days in his own office. The Taou-tai having submitted to their demands, his life was spared, and his escape two days afterwards connived at by them. The Hai-fang managed to make his escape in the morning and reached Sung-kiang in safety. Many hundreds of the native peasantry immediately joined the captors, but they received little sympathy on the part of the shop-keepers, the greater part of whom closed their stores and resorted to every expedient to get their goods removed from the city; and this notwithstanding repeated assurances from the insurgent leaders, that they should receive every protection and that robbery would be punished with the utmost rigour. That this last assertion was not a dead letter, they have given many proofs in the decapitation of offenders brought before them for this offence. No regular government even of a provisional character has been organized by them, and a degree of obscurity seems to veil their ulterior designs; latterly however they have declared themselves the subordinates of T'ai-p'ing Wang, whose orders they say they are waiting for. Several predatory excursions were at first made on the surrounding towns and hamlets, the chief result of which has been to alienate from them the greater part of the natives who had entered their service. For nearly a month the city was under the undisputed control of the insurgents, no attempt having been made on the part of the imperial government to retake it, until the 29th of September when some imperial junks arrived, but did nothing of consequence. The following day troops began to arrive and have continued to increase their numbers gradually ever since, until they now amount to near ten thousand; but with all this force, besides the assistance of several foreign vessels purchased for the Chinese government, their warlike operations have been remarkably destitute of any satisfactory result. The insurgents still hold the city as firmly as ever, and have even erected and manned some forts in the suburbs, from which the others seem

incapable of dislodging them. Since the siege has been going on, the insurgents have evidently risen in public estimation, a result which perhaps arises rather from contrast with their opponents, than anything inherently excellent in themselves.

The following is a copy of the seal used by the Shanghai insurgents, which although it bears a general resemblance to the one we have received from Amoy, differs in some particulars; it is printed with black ink on a square piece of white calico.



It will be seen that the line round the outside of the Amoy seal is wanting in this.

The characters in the angles are also different, and the meaning less obvious, Perhaps they are proper names. The upper left angle is *Yang chung* "overspreading loyalty;" the upper right is

Wan wa "A myriad tiles;" the lower right is *Gan kin* "Gold of the hill;" the lower left is *T'ien Hung sing* "Heaven (or the emperor) is surnamed Hung."

In the outer octagon, the second line of the stanza has 上 *shang* instead of 相 *seang*, giving the meaning,—

Bearing on their persons the secret badge of Hung.

In the inner octagon, the right side line has the character 關 *kwan* instead of 閱 *yue*, and may read,—

Stopping the existing corruptions.

The lower line is the same five characters, but placed in a different order, being read alternately right and left from the outside to the centre.

The line on the right side of the inner square has 共 *kung* instead of 洪 *hung*, which leaves the sense about the same, or,—

When all the Hungs in harmony combine.

The following eight characters are stamped on the back in red ink.

順天洪英興義公司 "The Hung heroes obedient to Heaven. The Patriotism prosperity corporation."

A plate about eighteen inches square is also in use among the insurgents, by whom copies were issued when the city was taken to the tradesmen living inside, on the payment of several dollars, as a pass to secure them from molestation, and procure for them the free liberty of entrance and egress at the city or camp with four gates, north, south, east and west, inside of which are portrayed a variety of objects, presenting to the eye of the uninitiated, a strange conglomeration of Confucian cosmogony, Buddhist idolatry, and modern history veiled in cyphers.

Round the outside is a border about two inches wide, on which are inscribed the following verses;—

The intention of the blood-dropping contract, is originally on account of the Ming.
In the city of Muh-yang, the heroes are collected together.
When first beginning to enter on life, the (*Hung chin*) world was my desire.
I took the oath to decapitate the Tartars, and not return to the T'sing.
At the first, the five ancestors on the day they were checked and oppressed,
In continued connexion passed over the winding entrance to Chang-sha.
In the Kaou ke[1] monastery they contemplated revenge;
Before their celestial intentions were matured, they were oppressed by the mercenary soldiers.
The five men each took a province, and each a separate lodge;
Resolving at the end of twice ninety years again to exterminate the T'sing.
In the White Stork[2] cave they themselves drew up a document,
And the divisions were illustrated in the Pavilion of the Cultivation of virtue.
On the earthen vessel was clearly determined, Duke, Marquis, and Earl.

1 高溪寺 Kaou-ke monastery, where the five priests sought a lodging after leaving Chang-sha. *Chinese Repository*, vol. 2, p. 289.

2 白鶴洞 White stork cave. There was one Chin Kinnan of the White stork hill who used to go up and down through the country pretending to speak upon reason, but really in search of honest men. *Chinese Repository*, vol 2, p. 290.

By "the enlarged transformations of the three great ones," [3] the brethren are connected.
The waters of Hung flowing abroad extend to the four seas.
The divisions of the black, red, pink, white, and green are clearly marked
Muh, Lih, Tow, She,[1] are placed on the right and left.
In the outer divisions are Sun and Tang sun, moon, and stars.
Within are stored up Heaven and Earth, and, Hung Ying is the mark
Sun and *Show* are assembled in harmony together in the celestial court;
While the disciples of Hung all stand connected at the side.
The great *Pang*, that noble bird will again reinstate the Ming;
The five men, each in his province will call together the brethren.
From first to last, the five lodges when once ninety are completed
When the south of Keang-soo combines its military force, hills and rivers will be moved
The Dragon, Tiger, Tortoise and Serpent [2] will exterminate the Ta tsing.
The combined transformations of the Tsing and Ming complete four nines.
Four and nine, three and seven, denote prosperity in the assembly.
At one and six, Fuh-kien opens, with Kan-suh and Shen-se
At two and seven, Canton returns, and Hu-kwang is perfected.
At three and eight, Kwang-si, Yun-nan and Kwei-chow consult
At four and nine, there are the troops of Kiang-nan and Sze-chuen.
At five and ten,[3] are Kai-fung in Ho-nan, together with Shan-tung.
At the end of all, when the work is completed, there is the witness at the waist;
The five men all keep this signal concealed on their persons;
That in future, when the time arrives, they may manifest their true feelings.

Ode on Preserving the second Pass.

The guard of the second pass is Ching Ke-yew,
He has come for the special purpose of joining our connexion and exterminating the Manchus.
When the teacher with the loose hair comes to rouse the men,
He will collect the five rivers together with the nine great waters.

Ode on Preserving the Pass.

The guard of the first pass Mei Too.lung
Stands erect in the right hand hall examining the heroes;
Those who have iron galls and copper livers are permitted to enter our ranks,
But if traitorous hearts venture here, their lives are not of long duration.
The peach and plum blossoms are opened, and the branches are covered with leaves.
The hair of my head is not yet dry, having lately come into the world;
Ten thousand times have I looked for the *Patriotic* brethren to come and instruct me;
Remembering the commencement, when I saw Hung.

3 參太宏化 *San t'ai hung hoa.* These are the four characters which are pasted on the doors of the houses in the city, but without the supplementary portions. The meaning is doubtful.

1 木亡斗世 These are the four characters giving the length of the reigns of the Manchu emperors

2 龍虎鳳蛇 These four characters are used symbolically for West, East, North and South.

3 The numbers employed here are evidently borrowed from the Yih king. In the Ho-too, an ancient figure much esteemed by the Chinese, composed of the nine digits arranged in a particular manner, 4 and 9 are placed together at the right hand side In another figure called Lo-shoo, in which the digits are differently arranged, 3 and 7 form the left and right sides repectively. In the ninth chapter of the Appendix to the Yih-king, written by Confucius, the passage occurs, "Each number has its proper combination," on which the commentator says "Possessing their combinations means that 1 unites with 6, 2 with 7, 3 with 8, 4 with 9, and 5 with 10," but the application of these numbers in the present instance is not very obvious.

General Tea-drinking ode.

As the changes in the colour of the tea are originally without end;
So my talents are originally common-place, and my attainments imperfect
Now that two brethren have come with ingenious questions,
May I trouble you to instruct me in two or three particulars.

The five colour coverlet ode.

The five colour yellow bound single coverlet,
Thirty-six wide and seventy long,
Is for the brethren of the ten thousand branches of the Hung family;
Therefore they take this coverlet as a memorial to lay on the heart and reins.

Ode on the waters of the three rivers of Lo.

The fountain of the waters of the three rivers, arises from the excellence of the heart;
Washing and purifying the heart and limbs, to build Muh-yang.
The true heart that consumes aright, obtains the happiness of long life,
But the traitorous heart that consumes to excess, is lost amid the waters.

Ode on preserving the Fire pots.

Heaven sent down the grandson, who could eat men;
But we happily obtained the priest of Tang to save our persons;
The true dragon has come to preserve us from the transit of the fire pots;
Revolving on the pivot, Heaven and earth will revert to the Ming.

The Canton twelve line stanza.

Obedient to Heaven, and in harmony with the seasons, our commencement is from our two parents.
Heaven and earth have no private motives; these originate with men.
Throughout the two capitals and the thirteen provinces,
Religious teachers and military generals again form two divisions;
The military heroes at the call, come forward from every quarter;
They come to serve the Ming dynasty, and to honour the sovereign prince.
At a future day, when collected together, all will receive dignities and emoluments.
The felicitous star will encircle with its protection our prince and his ministers.
In places of resort, a separation will be observed between the houses and lands of Manchus and Chinese.
The multitude of the people will stand at ease and rest composed:
Heaven and earth preserving the Ming will again revert;
And the exemplary courage of the lower camp will fix Heaven and earth.

At the upper border are ten flags with the characters SAN, SHOW, HO, HO, TUNG, and LUNG, HOO, KWEI, SHAY, HWUY, one on each. There are also outlines of a Fir, a Cypress, a Peach and a Plum tree; besides a suspended lantern called the "Lantern of Hung," and a lamp with seven lights, called the "Seven star lamp." On the lower border, there is an upright tablet with the inscription "Inner land of T'ae-p'ing."[1] Another has "Rigidly apprehend loose vagabonds." There are also two pillars bearing the inscription "*Kai-yin*[2] year, 7th month, 25th day, at the hour of *Chow*[3]." On each of the four gateways, is the name of a "great general;" that on the west in Han Fuh; on the north Li Chang-teen, on the east Han Ming, and on the south Ching Teen.

1 The lodge room.

2 The cyclical characters corresponding to the year 1674, when the society was established

3 From 1 A.M to 3 A.M.

Immediately within the lower or east gate, is an upright frame with a bell suspended in the centre. On the frame is inscribed "Circle of Heaven and Earth;" on the bell is "Original merit of establishing the dynasty." Above this are two stanzas as follows,—

On preserving the circle of Heaven and Earth.

The Cœlo-terrestrial protector Woo Hwan-urh,
Enters straight the gate of Hung, to guard the city pond:
When the yellow flowers disappear, the red flowers open out;
The children of Hung in successive generations, connect ten thousand branches in their bond.

Ode on selling fruit.

There are fruits of five colours in Muhyang;
Thousands of men are seen to pass, ten thousand men partake;
The loyal and *patriotic* buy and come and eat;
But the disloyal and unpatriotic are not allowed to taste.

In the centre of the enclosure, is an annular figure, above which is the name "Hall of the Loyal." In the middle of this figure, is the *T'ai-keih*[1] composed of the *Yin* and *Yang*; outside this is a circle composed of the eight trilinear diagrams of the Yih-king; outside this again is another circle, having the same stanza contained in the outer octagon of the Shanghai seal, with some slight variations; the arrangement of the four lines is also different. Round the outside at equal distances, are five projecting figures, each marked *fang* "lodge;" to four of these are attached respectively the four terms in the angles of the Shanghai seal.

Along the top of the enclosure is a row of shrines to canonized personages, in the centre of which is a pendant ornament, inscribed at the top "Flower Pavilion," and underneath "By order of the Commander in chief."

Beginning at the right side, the first tablet has,—

The first ancestor Hung Koo-shing.
The first female ancestor, the lady Le,
The ancestor of the second generation Chu Hung-ying
The second generation female ancestor, the lady Kin,
The little Lord Chu Hung-chuh,[2] in the official station.
} Seat of their spirits.

Inscription at the top,

Ancestral chapel of the Hu family.

Inscription down the sides,—

Out of doors, our former prince's face has not been seen.

1 According to the system propounded in the Yih-king the *T'ai-keih* or supreme physical principle generated 2 models *Yin* and *Yang*, the inferior and superior or female and male principles of nature; these 2 models generated the four images *T'ai-Yin*, *T'ai-yang*, *Seaou-Yin* and *Seaou Yang*, or Moon, Sun, Stars and Planets; and the 4 images generated the *Pa-kwa* or 8 diagrams, from whence emanated all material creation

2 Grandson of Tsung-ching the Ming emperor and his empress Le. *Chinese Repository*, vol. 18, p. 290.

In the house, the mind of the ancient Buddhas may be known.

Second tablet,—

Seat of the spirit of the patron of the metropolitan city.

At the top,—

Temple of the city patron.

Down the sides,—

Originally there were two capitals and thirteen provinces;
When the Ming prince ascends the throne, dignities will be again conferred.

Third tablet,—

Seat of the spirit of the sacred deity Kwan.

At the top —

Temple of Kwan Ti.[1]

Down the sides,—

Eminent virtue and surpassing talent will lead the house of Han:
For a thousand years, through remote antiquity, he may be associated with Heaven.

Fourth tablet,—

Seat of the spirits of 108 teachers.

At the top,—

Shaou-lin Monastery.

Fifth tablet,—

Hoo Tih-le
Fang Tai-hung
Tsai Tih-chung
Ma Ke-hing
Li Sih-kai[2]
} Seat of their spirits.

At the top,—

Benevolence, righteousness, propriety, knowledge, fidelity.

Sixth tablet,—

The military leader Chin Kin-nan[3]
The royal teacher Wan Yun[4]
The head lance Tien Yew-hung[5]
} Seat of their spirits.

At the top,—

Ancestral chapel of the Hung family.

1 A famous deified warrior of the 3rd century.

2 The five surviving priests of the Shaou-lin monastery.

3 While the five priests were at the Red flower Pavilion, Chin Kin-nan came there, and informed them that he had been an officer in the Board of War and a member of the Han-lin, but having been driven from his post by the machinations of his enemies, he had retired to the White stork hill, but had now come to join their company and avenge his wrongs. *Chinese Repository*, vol. 18, p. 299.

4 While the five priests and their company were proceeding to Che-kiang, they passed a monastery, from whence a priest named Wan Yun-lung came out to enquire what priests they were who carried banners and asked them to enter his dwelling. This man had formerly unluckily killed a man, and fled to a monastery; he was ten cubits high, his head as large as a peck measure, his hair red and his arms like two beams. They told him, "The officers of this dynasty are unreasonable, and we are going to revenge the burning of the Shaou-lin monastery and murder of our brethren." He was filled with anger at their recital and they tried to induce him to join them, saluted him as their *ta ko*, or great elder brother, and make him generalissimo, whereupon he took the oath. The troop had several skirmishes at the Five Phœnix hill, in which this Yun-lung lost his life, on the 9th month, by his horse falling upon a rocky ledge; on this Kin-nan said "It was not the will of heaven that he died, his number was not yet fulfilled."—*Chinese Repository*, vol. 18, p. 290.

5 When the priests had incorporated themselves into a society with Kin-nan for their general a man named Hwang Ching-ngan joined himself to them, who in Kin-nan, seeing his bravery, appointed Head Lance of the Van. The brotherhood took the surname of *Hung* at this time, and *patriotism* for their watchword; Hwang also changed his name to *Tien Yu-hung*. *Chinese Repository*, vol. 18, p. 220.

Seventh tablet,

Seat of the spirit of Tah-mo[1] the founder of the sect.

At the top,—

Temple of Ling-wang[2]

Eighth tablet,—

Seat of the spirit of the great god Hwa-kwang[3]

At the top,—

Temple of the Five visible ones[4]

Down the sides,—

The spirit of Tung Ling-kwang is all pervading.
The junior members of Fang recompense Heaven and Earth.

The order of grouping the curious assemblage of miscellanies inside the enclosure is not very intelligible to one not in the brotherhood, but several objects strike the eye as historical landmarks, although they probably possess also a more hidden application. Following the account already referred to in the *Chinese Repository*, we find the Society originated with the priests of the Shaou-lin monastery on Kew-leen hill in the department of Fuh-chow, in Fuh-kien. [On the right side of the plate is a hill with the name "Kew-leen hill,"] Being persecuted by the ruling powers, they resisted; in consequence of which their monastery was set fire to at night, when out of one hundred and twenty eight, all perished but eighteen men. These found their way to Chang-sha in Hu-kwang, where thirteen of their number died of starvation. The remaining five, Tsae, Fang, Ma, Hoo, and Le, were saved in a vessel by two men named Seay and Woo, [At

1 One day, a red vapour appeared in the sky, and the sage Tahmo stood on the top of a cloud, holding a pair of ashy sandals; Hwang went up and besought him for aid; he enquired into all the particulars of his history, and took his loyal spirit, and carefully put it into a gourd jar. *Chinese Repository*, vol. 18, p. 263.

Tah-mo is the Chinese form of Bodhidarma, the 28th Buddhist patriarch, successor of Shakia, who was raised to the dignity A.D 457. Originally the son of an Indian prince he embarked for China, and took up his residence in Honan, where he died i 495, leaving the secrets of Buddhist theology to a Chinese, who was appointed his successor. The similarity in the name has given rise to s me singular mistakes with regard to this Tah-mo. It was a favourite opinion with many of the Roman Catholic missionaries that this was no other than the apostle Thomas who had come to introduce Christianity into China; while Father Georgi supposes him to have been a certain Thomas, a disciple of the famous schismatic Manes We are indebted to Remusat for having cleared up the mystery that hung over the memory of this ancient sage. See *Melanges Asiatiques* vol 1 p 125

2 When the five priests had tarried a fortnight at the Kaou-ke temple, they heard the troops had learned their retreat, and fled to the Ling-wang temple.

3 A Buddhist deity belonging to bygone ku'pas

4 These are apparently identical, or of kindred character with the *Woo-shing* "Five sages," a class of corrupt spirits severely proscribed in the Penal Code, as being invoked by witches and wizards. In the reign of Kang-he, a temple to the worship of these, under the synonym of Woo-tung, existed on the Langkea hill, three miles west of Sn-chow and was utterly destroyed by order of the mandarins It was restored during the present century, and again reduced to ruins and the idols cast into the Great Lake, in 1824. See *Su-chow Fu-che.*

the bottom of the plate is a shrine, denominated the "Temple of *patriotic* combination." On the tablet are inscribed the two names "Seay Pang-hing," and Woo Ting-kwei."] After a while the priests took leave of their hosts Seay and Woo, and went to the Kaou-ke temple to seek a lodging, where they were received, and told all their wrongs to Hwang and his wife Chung living there. [Above the centre figure on the plate, is a tablet with the inscription "Chu Hung-ying of the Ta-ming dynasty." On the right side is the inscription, "The earth is rent; from the (高 *kaou*) lofty peak, flow the (溪 ke) parting streams, at the hill which has stood from remote antiquity." Down the left side is, "At the door is held the court; the united waters of the three rivers, for ten thousand years have flowed to the ocean."] After a fortnight, hearing that the troops had learned their retreat, they fled to the Ling-wang temple. A troop of horse pursued them, but they escaped to a hill where they met the family of their former friend Keun-tah, and saw a peach-wood sword coming out of the ground, on the hilt of which was engraved the sentence 'Overthrow the Tsing, restore the Ming.' The two women took this sword, went out against the soldiers and compelled them to retreat. [At the top of the plate, is a sword with the name "Peach plum sword."] The next day the priests returned to the Ling-wang monastery. Being pursued again by the soldiers, they fled to the Lung-hoo hill. [Near the Kew-lien hill on the plate, is another marked "Lung-hoo hill."] Soon after this, Chin Kin-nan came to the priests, and told them he had been an officer in the Board of War, but having been driven from his post by the machinations of his enemies, he had come to join their company and avenge his wrongs. They were much pleased and replied "Happy are we in getting your aid; now we shall succeed." They accordingly divined a lucky time, viz., 25th day of the 7th month, when they drank their blood and took the oath of brotherhood. [On the right of the plate is an irregularly shaped figure, down the centre of which is the inscription. "The whole family bound together in harmonious union." A line on the right has the four cyclical characters *Yih, Sin, Maou, Yew; Yih-maou* answering to the year 1765 and *Sin-yew* being the fifty eighth day of the cycle; so that this, with the line on the left side, gives,—"In the year 1765, on the fifty eighth day of the cycle, the five grand lodges were opened."] Having organized the association, they made Chu Hung-chuh their head, Chin Kin-nan their general, and Hwang Ching-gnan, Head Lance. They then raised troops and went to Che-kiang, being joined on the way by Wan Yun-lung, who lost his life during a skirmish. His ashes were buried near

Ting hill. [Above the figure last mentioned, is a hill marked "Ting hill."] Besides the objects above specified, the following are also depicted:—Two shrines, one to the "Buddhist Patriarch," and one to "Kea-lan Yay," a Buddhist divinity worshipped in the temples at the present day; three pagodas, the "General's Pagoda," "Pagoda of Wan Chang," the patron of letters, worshipped by the literati; and the "Pagoda of Hung;" three Pavilions, named the "Enclosure of Extreme Purity," "Enclosure of Peace," and upholding the Ming enclosure, three suspended flags, one bearing the inscription. "Obedient to Heaven and acting on right principles,"[1] and 川大車日 which appears to be a contracted form of the sentence 順天得明 "The Ming dynasty will revert in obedience to Heaven;" another has the strange composite character "Show" in the centre; at the outer corner is "Convoking the military assembly;" the upper corner has "Heaven," the lower corner "Earth." Attached to the flag are two pendants, one bearing "When the Hung dust is everywhere dispersed abroad, the heroes will all be called in;" the other has "The brethren from sea to sea will serve the Ming dynasty;" the other flag has the character *Shwae* "Commander-in-chief" in the centre; along the upper edge is inscribed. "The deposed Li and Chu Hung. In obedience to Heaven, the Ming dynasty will revert;" along the lower edge is "The Tsing empire, *Muh, Lih, Tow, She.*[1] United together in harmonious union." There is a ship with the character *Show* "Old age" on the flag; also three squares, one having on it "Hall of united obedience;" another has "All united in harmonious union," and the third has "Connected myriads is our memorial;" two radiated circles, one having the word "Sun" in it, and the other "Mirror;" an incense pot; seven "fire pots;" the four composite characters *Sun t'ai Hung hwa* "The enlarged transformations of the three Great ones;" three fields; three pools, named respectively "Gulf ascending pool," "Clear water pool," and "Stone hamlet pool;" "Abacus;" "Ink;" "Pencil;" "Ink pellat;" "Gnomon;" "Foot rule;" "Lunar crescent sword;" "Seven star sword;" "Priest's gown;" "Drum;" "Scissors;" "Rod of Hung;" "Pear;" "Orange;" "Yu plant:" and "Plantain." At the foot of the plate is a tablet bearing the following stanza:—

Convoking the Army Tablet.

Illustrious, illustrious the middle kingdom; vast, vast, the celestial empire.
A thousand states offered her tribute; ten thousand nations paid court to her.

1 This sentence is quoted by the insurgent Lew in a recent proclamation. *See North-China Herald* No. 168,

1 These are the four characters denoting the respective reigns of the Manchu emperors.

The barbarians have usurped and seized her; resentment for this is difficult to suppress.
Enlist troops, buy horses; high erect the flowery bridge,
When the *Patriotic* government commences at Muh-yang, the Tartar dynasty will be exterminated.

What may be the ultimate fate of this formidable confederacy is a problem by no means easy of solution, but it is one at the same time fraught with considerable interest. Bearing in view the character of the institution, the alleged cause for which it was established, the manner in which it is upheld, and the way in which they propose to attain their object, patriot and the philanthropist will doubtless pause, before committing themselves in the flush of popular excitement. We know that a deadly animosity is cherished by this society against the ruling dynasty; we have some reason to believe that if not actually proscribed, they are looked on with a degree of suspicion by the party now aspiring to the supreme power. Should the object of the Triad Society be obtained and the Ming dynasty restored, what benefit would accrue to the empire? Admitting that the Tsing dynasty is corrupt, it is at least questionable whether the Ming dynasty which gave place to it was less so.

We have seen the *Peh-lien keaou* society, with equally bold pretensions brought to nought. Other bodies have at times made partial eruptions on the surface of society, but have soon disappeared under the rigorous system of proscription to which they have been subjected. Some of these have been of a religious and even of a fanatical character, and apart from their secret compact, call to mind analogous delusions in our own country, in such cases as Johanna Southcote and the unfortunate Richard Brothers, who would doubtless have been submitted to torture and death, had they propounded their strange pretensions in the celestial empire.

Of this class was the 清茶門教 *Tsing cha mun keaou*, "Pure tea sect," the leader of which, Wang Yung-tai, was arrested in 1816 sentenced to be cut in small pieces, and his head publicly exposed on a pole. It appears this Wang gave out that he had received the dogmas he taught from his ancestors, the first progenitor of whom he said resided in Heaven. Holding the doctrine of the reign of three Buddhas in succession, Yen-tang Fuh's reign being already past, Sheh-kea Fuh being the present ruler of the world, he taught that Me-lih Fuh the future Buddha would become incarnate in his family, and would carry all the members of the sect to the land of the immortals, where they would be free from every calamity. On the 1st and 15th of every month, the votaries of this sect burnt incense, made offerings of tea, bowed down and worshipped the heavens, earth, sun, moon,

In 1817 a memoer of the imperial family was charged with being connected with a rebellious association, called the "Great ascending Society." He was in consequence degraded from his natural rank by the emperor.[2]

Other secret associations about that time were named, "The Society of glory and splendour," "The red beards," "The White-jackets," and the "Short-swords."

A memorial to the emperor in 1818 gives the names of one hundred and ninety persons who had declared their abandonment of all connexion with several proscribed societies, among which are enumerated the sects denominated, the "Red Bright," the 靜空 *Tsing kung* "Silent Void," 天主 *Tien choo* "Roman Catholic" 老佛門 *Lo fuh mun* "Ancient Buddhist" 一注香 *Yih choo hiang* "Single incense stick" 燒香 *Shaou hiang* "Incense offering" and "Pure Tea" sects. The list was retained in order that if again detected in connection with any association, they might be more severely punished, than they would have been without a previous pardon.[3]

The following is a translation by Mr. Davis of an imperial edict, issued in the third month, 1824. "*Ke-shen* (governor of Shan-tung) has presented to us a report of the trial and condemnation of the banditti who have been propagating lessons of rebellion, and has at the same time sent up lists of all those officers who exerted themselves in the apprehension of the rebels, together with other particulars. By these it appears that the traitor *Ma-tsin-chung*, a native of *Tsing-ho* district in *Chih-le* province, made himself the head of an unlawful association at *Lin-tsing-chow* in the province of *Shan tung*, and that he, with his associates, organized themselves into self constituted ranks and grades of authority, after the model of real officers of government. They circulated secret signals among themselves, and consulted together for the purposes of treason and rebellion. Their crime has been enormous,and their wickedness of the deepest dye. The said acting *Foo-yuen*, however, at the head of the civil and military officers, at once crushed the incipient evil, without giving the slightest previous intimation, and apprehended accomplices in the conspiracy to the number of above five hundred and seventy persons."[1]

In 1831 a secret society under the name of the "Wonderful Association" was discovered at Pĕking, and although we have no detail of the practices or objects of this association, yet we find the leader was put to death by strangulation.

1 *Indo Chinese Gleaner*, vol 1, p. 19.
2 *Indo Chinese Gleaner*, vol. 1, p. 87.

In the following year, the authorities at Peking were engaged in an investigation with regard to another newly discovered sect headed by one Yin Laou-seu, who called hinself Nan Yang Buddha, and collected several thousand disciples extending though three provinces. His body was cut to pieces by a slow process, and his heart paraded about in the place where he taught, as a warning. His son was immediately decapitated for conniving at this father's deeds; and several others of the sect were sentenced to the same fate.[1]

Similar detections seem to be of not unfrequent occurence, and we may with reason assume, that the number of secret associations existing in the empire is much greater than the number whose operations have been brought before the public, and if it be a fact (which probably few will gainsay) that the existence of these is incompatible with a sound state of society, then the inference is clear that there must be some radical error in the system of government which has led to such a pernicious state of affairs in the body politic.

1 *Ta Tsing leu leih*, vol. —, p. —.
* *Asiatic Society's Transactions*, vol. 1, p. 396.
† *Chinese Repository*, vol. 1, p. 31.
* *Chinese Repository*, vol. 1. p. 295.

COMPETITIVE EXAMINATIONS.

When we the sons of Japhet become dwellers in the tent of Shem, we are verily strangers in a foreign land. Though the assertion may be trite, yet it is true to an extent we are scarcely conscious of, especially within this the borders of the Land of Sinim. Who—that has had his lot cast in these ends of the earth for a season—does not remember the feelings with which he looked upon the denizens of this ancient empire, during the first fortnight of his residence, as he observed them strolling about, decked out in the richest silks and satins, and wielding a fan with that grace which only a celestial can assume? Probably a feeling of compassion arose in his mind on the occasion;—we will not suppose any less generous impulse; nor is it our object to adjudicate the relative merits, when we venture to assert that these same celestials were equally strong in a consciousness of their own superiority. Something has been done towards a better mutual understanding, but still it is true that we are widely separated by customs, feelings, and interest. They know something of our military achievements, and they acknowledge the preponderance of physical force on our side;—mayhap their minds are also tinged with a wholesome dread of collision;—while we in our turn are amused with the puerilities of their warlike strategics. Years of commercial intercourse have to a limited extent established a better understanding between the two races, while it is felt that similar interests actuate the merchants of both hemispheres; and time will doubtless show that commerce has had no inconsiderable share in removing the stumblingblocks, and promoting the mutual civilization of the inside and outside nations. But when we come to the department of letters, it is here indeed

that we are to them as barbarians. Each seems to glory in the extent of his ignorance with regard to the other; and in very deed between them and us, there is a great gulph. This state of things strikes one as singular in some respects, considering that literature is the peculiar glory of this nation. A visit to a prefectural city during a literary examination is well calculated to give some idea of the importance in which letters are held. The élite of the youth of China are seen pressing forward, eager to test the success of those acquirements, which it may be has cost them many a weary day and night during the past twelve months, and upon which they have built their hopes of future honour and preferment. A knowledge of the extensive machinery in operation throughout the empire connected with these examinations, would afford more than a hint of the great pains taken by the imperial government to select from the countless mass, those who are best qualified by their talents to fill offices with honour to themselves and advantage to the nation. The following remarks have been suggested to us by the recent examination at Kwăn-shan, which although now somewhat late to be considered news, yet refer to a subject, which we opine is sufficient to engage the interest of many of our readers.

Literary examinations may be classed in four grades. The lowest takes place at the district city about once in 18 months-where all youth desirous of competing for honours in the higher grades must first make their appearance. Having been successful in this, they next proceed to the prefectural city, where they are examined by the local magistrate (*che foo*). After these preliminaries, they proceed to the prefectural examination to compete for the first degree (*sew tsai*). Having been successful so far, they next repair to the triennial examinations at the Provincial city which take place once in 3 years, to compete for the second degree (*k ŭ j ŭ*). The competition for the third degree (*tsin sze*) occurs in the capital, also once in 3 years. A few words on the Kiang, su examinations will give a general idea of what is taking place, or would be taking place, throughout each of the 18 provinces, were it not for the present insurrectionary troubles.

Sun Paou-yuen, the imperial commissioner who has been appointed to conduct the examinations throughout the province of Kiang-su, is a vice-president of the Board of Revenue, and wears a red button indicating the 2nd rank. At the mature age of 58, he has reached his present position without any signal indication of extraordinary talent. Having left Peking at the close of the Chinese year, he has taken up his temporary residence at

Kiang-ying on the Yang-tsze kiang, and reached Kwăn-shan last month, to commence the first of a series of examinations at the several prefectural cities of the province. He is now presiding over a similar arena at Sung-kiang foo, after the completion of which he will proceed to Kiang-ying to hold the examination to the prefecture of Chang-chow and so on till he has given all the aspirants of the province an opportunity of signalizing themselves. This done it will be time for him to commence anew, and repeat the routine, which will nearly fill up the three years of his commission, and entitle him to return to court and make his report to the emperor. The examinations for the prefecture of Su-chow are always held at Kwăn-shan, in compliance with an old custom, and here accordingly the magnate Sun arrived with a staff of twelve subalterns on the 20th March, and on the 22nd the hall was opened for the candidates. The town presented an unwonted bustle, the day was fine, and upwards of ten thousand competitors had assembled on that and the succeeding days. Before sunrise the *sew-tsaïs* had already collected in the hall, answered their names, and received the themes which were to occupy them during the day. These were four in number, being exercises in poetry and the antiquities of China; and it should be remarked that these texts are given without any indication of the work from which they are extracted, which the students are expected to know and state, as also to explain the meaning of the texts, which are generally remarkable for their terseness, and this has to be written in stanzas of an appointed form. Of the texts in question, the first consisted of five characters taken from a book by one Wang Tsung, published about 1800 years ago, and by no means a commonly known or much read work. If a translation of the theme might be attempted, it would read something like this—"They were *au fait* at the Five Classics." This alludes to the disciples of Confucius. When it became bruited through the town that this text had been given, one or two copies of Wang Tsung's work which were discovered among the extensive book stores, immediately rose to most extravagant prices. The next theme consisted of four characters from the works of Seun-tsze, one of the most famous of the philosophical writers who lived in the 3rd century B. C. It may be translated,—"The superior man nourishes the source," alluding to the emperor nourishing purity at the fountain head of the government. The third theme was five characters from the poems of Taou Yuen-ming who wrote about the end of the 4th century. The English of the sentence is "My soul is devoted to music and study." The essay on this had to be written in

stanzas of seven words to a line. The fourth and last for the day was,—"Imitate Luh Kien-nan's headings to the portraits of eighteen scholars." Luh Kien-nan was a poet and voluminous writer of the Sung dynasty, and the competitors were expected to imitate his style of poetry in an ode on the above laconic theme. Such formed the first day's exercise, on which the students were engaged till about sunset. All these had already obtained their first degree at previous examinations, and the object of this was to keep them up to the mark, so that it is in some degree compulsory for all graduates to attend.

The next day was occupied with a special exercise for some three or four hundred *sew tsais*, who had from various causes, omitted to be present at previous examinations, and had thus entailed so much extra labour on the present occasion.

The 24th was devoted to the youthful talents who had not yet mounted the first step of the preferment ladder. Two themes were appointed for the day, the first being a line from a poem by Luh Kien-nan above mentioned: *i. e.*—"When the drizzling spring showers fall on the flags, the swallows fly low."

On the 25th and 28th days the *sew tsais* were again examined, the themes being taken from the Classics and the Four books. On March 30th, April 1st, 3rd, and 5th, the aspirants for the 1st degree (*sew tsais*) were again examined. During these four days, 340 competitors in all from the prefecture of Su-chow and the department of Tai-tsang, were successful.

From the e imperfect notes it may be gathered that the student's life in China, if followed up with the ardour that the subject demands, is far from being a sinecure, and that with all the defects that may have crept into the system in the course of ages, the theory at least is sound at the base.

Historical.

ISRAELITES IN CHINA.

It is well known that Israelites in considerable numbers have been resident in China from a very remote period, and brief notices of their existence have from time to time come before the European public. Interesting as such incidental notices undoubtedly are, they are generally far too meagre to satisfy the inquiring mind; and we cannot but regret the absence of fuller details, which would prove acceptable to the ethnologist, to the historian, and to those who delight in tracing out the wanderings and fortunes of the chosen people in the lands of their expatriation. In the twelfth century, Benjamin of Tudela, a Spanish Jew, made a journey through several of the kingdoms of Asia, to discover the existing remnants of his kindred, which he succeeded in tracing up to the confines of China. Had he extended his travels into that empire, he would have doubtless left us much information on the subject, regarding which we are now left to conjecture. The learned Rabbi Manasseh asserts that a part of the Ten tribes crossed the Great Wall, which divided China from Tartary, and settled in the former country; and he believes that the Scriptures clearly refer to this emigration of the dispersed tribes. The existence of a colony of Israelites to the present day, in the centre of China, though merely sufficient to attest the fact of an earlier prosperity, yet precludes all doubt as to these people having penetrated into the empire in former ages.

It becomes then a question of some interest to ascertain, if any memento of the existence of these Hebrews has been preserved in the literature of the Chinese; regarding which, the following observations are presented in a spirit of diffidence, with a desire that the discussion of the question may lead to further light.

We find that during the middle ages, the annals of China contain the mention of several foreign sects by name, among which are *Muh-hoo*, *Ta-tsin*, *King-keaou*, *Mo-ne*, *Mo-ne*, *Po-sze-king-keaou*, *Ho-shin*, *Heen-keaou*, *T'een-shin*, *Hoo-t'een-shin*, *Hoo-heen*, *Ho-heen*, &c. Of the above creeds, some receive their designation from the name of their founders; as *Muh-hoo*, Mohammedans, and *Mo-ne* or *Mo-ne*, the Manichæans. The designation of others is national; as *Ta-tsin*, the Syrian and *Po-sze-king-keaou*, the Persian Classic religion. One has an honorific appellation,—*King-keaou*, the Illustrious religion, the name adopted by the Nestorian Christians in China. Others are named from the objects they worship; as *Ho-shin-keaou*, the Fire worshippers or Parsees. One of this class is called the 祆教 *Heen-keaou* to which it is now proposed to draw attention. *T'een-shin*, *Hoo-t'een-shin*, and *Hoo-heen*, seem to be merely synonymes of *Heen;* and *Ho-heen*, the equivalent of *Ho-shin* of the Parsees.

Endeavouring to ascertain what is the *Heen-keaou* or *Heen* religion here spoken of, it will be well first to inquire into the meaning of the character *Heen*. Speaking of the chapels of this sect, Peih Yuen, the editor of a recent edition of the *Ch'ang-ngan-che*[1], says, I find these are the same as the (*T'een*) HEAVEN chapels spoken of in the History of the Northern Wei dynasty. In ancient times there was no such character as *Heen*."[2] Peih Yuen's assertion is so far borne out by reference to the native dictionaries, for the character is not to be found in the most ancient ones; and the earliest lexicon in which it occurs appears to be the *Yuh peen*[3], which gives under this character, "Pronunciation, *Heen*. A foreign spirit."

The *Kwang-yun*[4], of later date, gives, "A foreign spirit. In the 'Catalogue of official grades,' there is one styled the HEEN chief. Pronunciation, *Hyen*."

The *Tseih-yun*, a work of the Sung dynasty, gives, "Pronunciation, *T'een;* the same sound as *T'een*."

The *Yun-hwuy*, a subsequent work, gives, Pronunciation, *Hyen;* the same sound as *Heuen*."

The *Luh-shoo-t'ung*, published during the fourteenth century, gives, "In Kwan-chung (Shen-se), Heaven is called HEEN. Foreigners designate Deity by the word HEEN."

1 Published A.D. 1787.

2 Book IX. p. 4.

3 Published by Koo Yay-wang, A.D. 523.

4 This is of uncertain date, but was doubtless written during the Tang dynasty. The earliest known edition is of the time of the Sung.

The *Hung-woo-ching-yun*, about the end of the fourteenth century, gives, "A foreign spirit. The character is formed from the radical *T'een* (Heaven). In the 'Catalogue of the T'ang officials,' there is one called the HEEN chief."

The *Ching-yun-hwuy-peen*, which is a re-arrangement of the materials of the preceding, with modifications, published at the beginning of the seventeenth century, says, "This rhymes with *Scen*. *Heen*. Pronunciation, *Hyen*. A foreign spirit. The character is formed from the radical *T'een* (Heaven)."

The *Ching-tsze-t'ung*, published about the middle of the seventeenth century, gives, "Pronunciation, *Hyen*. Same sound as *Heen*. The name of a foreign spirit. In the 'Catalogue of the T'ang officials,' there is the HEEN chief."

The *K'ang-he tsze-teen*, published under the direction of the second emperor of the present dynasty, merely contains a summary of the preceding notes.

A new edition of the *Shwo-wan*[1], *Shwo-wan keae-tsze t'ung-shih*, gives, "A foreign spirit. The character is formed of the elements *She* (Spiritual influence) and *T'een* (Heaven). The pronunciation is *Heen*."

From the above lexicographical details, then, we learn that the character 𤇾天 is pronounced *Heen*, that being the local pronunciation of the word *T'een* (Heaven) in the province of Shen-se; that this same *Heen* was the generic word for "Deity" among Western foreigners; that it was the name of a Being worshipped by a foreign sect in China; and that it formed a component part of the title of a government officer during the T'ang dynasty.

Thus we see that the character is of comparatively recent formation, as it is not found in any book earlier than the sixth century; and we have the authority of Peih Yuen, noticed above, for the fact that the word *Heen* is the synonyme of *T'een* (Heaven) which we find mentioned as an object worshipped by a foreign sect at the beginning of the sixth century; for he says the character *Heen* was not used in ancient times.

In opposition to this view, indeed, Yaou K'wan[2] professes to trace this religion up to the seventh century B C. The passage on on which he supports his statement is taken from Too Yu's

1 *Shwŏ-wăn* was composed by Heù Shin, and published A.D 100, being the first dictionary arranged according to the radicals. The original work however does not contain the character *Hëen*.

2 In the *Se-ké t'ung-yù*, a collection of notes critical and historical, written about the middle of the twelfth century, book I. p. 18.

commentary on the *Tsò chuen*,[1] which is an amplification of Confucius' history *Ch'un ts'ew* (Spring and Autumn Annals).[2] The text of the *Ch'un ts'ew* says, "In the nineteenth year of Duke He (B. C. 631), in summer, on the forty-sixth day of the cycle, the men of Choo took the Viscount Tsang and offered him in sacrifice." The *Tsò chuen* says regarding this, "In summer, the Duke of Sung caused Wăn the Duke of Choo to offer up the Viscount Tsang at the tutelary altar by the river Suy, with a desire to conciliate the Eastern foreigners." The Commentary on this, as quoted by Yaou K'wan, reads, "The Suy receives the Peen, and passing Chin to the east, leaving Leang-tseaou and Pang-ching, it flows into the Sze. Near this water a *Hëen* spirit ruled, which it was the general practice to serve with tutelary worship; hence human beings were slain and offered in sacrifice." This is such an evident perversion of the original passage, that it would be scarcely worth noticing, were it not that it has been reproduced without comment in the modern native geography *Hae kwo t'oo chë*.[3] The reading is supported by no authority; the word here given 袄 *Hëen*, being in all standard editions of the Classics written 祆 *Yaou* (Elfish or Demoniacal), which is doubtless the true version, an equivalent form of this character being 袄 which very nearly resembles *Hëen*; and indeed the dictionary *Hăng woò chăng yùn* gives the same form of character (probably through inadvertence) to the two definitions; but the other dictionaries all clearly mark the distinction of the two characters. The anachronism has not escaped native scholars, one of whom thus tersely expresses himself in the *Gae jĭh ts'ung ch'aou*[4]: "Too Yu, in his commentary on the *Tso chuen*, regarding the passage 'the tutelary altar by the river Suy,' says, 'There was a *Hëen* chapel upon the Suy river'. That is impossible. How could there be a *Hëen* chapel in China in the time of Duke Seang of Sung?"

Is there any reason to think then that the *Hëen* religion is

1 This was written by Tsò Kew-ming, a disciple of Confucius, and is a record of contemporary events necessary to throw light on the original chronicle.

2 This is a history of Loo, the native state of Confucius, being the only complete work written by the sage.

3 The materials for this work were in great part collected from foreign sources by the Commissioner Lin, famous in the first war with China. The work of editing was confided to Wei Yuên a highly accomplished native scholar, but a bitter enemy to foreigners, as is too apparent in the spirit of the work throughout, which is a valuable one nevertheless.

4 The *Gae jĭh ts'ung ch'aou* is a miscellaneous work, discussing numerous questions of historical interest, said to have been written by one Yĕ, about the end of the Sung dynasty.

that of the Israelites? Bearing in mind that Heaven is used in China by metonymy for the God of Heaven, it may be well to draw attention to a *usus loquendi* discoverable in the Old Testament, where we find the frequent employment of the term God of Heaven to designate Jehovah, in the books written subsequent to the Babylonish captivity, instead of Lord of Hosts, which is generally employed in the earlier historical books and in the prophetic scriptures. This appears to be especially the case in the narrative of intercourse with foreign nations, implying the supremacy which the Israelites asserted for their God above all the gods of the nations; an honour which seems to have been freely accorded also by the heathen potentates, with whom they came in contact. During the Babylonian exile, the prophet Daniel, having addressed the GOD OF HEAVEN, is introduced as fearlessly asserting the power and omniscience of the GOD OF HEAVEN, before the despot Nebuchadnezzar, who replies: "Of a truth it is, that your God is a God of gods, and a Lord of kings"[1]; and on a later occasion, after his recovery from a humiliating affliction, the monarch was constrained to say, "I, Nebuchadnezzar, praise and extol and honour the KING OF HEAVEN, all whose works are truth, and his ways judgment."[2]

Cyrus king of Persia, in his edict for the restoration of the captives, says, "Jehovah the GOD OF HEAVEN had given me all the kingdoms of the earth; and he had charged me to build him an house at Jerusalem, which is in Judah."[3]

Again, Darius, in his decree confirming certain privileges granted by his predecessor Cyrus, directs the Persian governor to furnish the Jews with such articles as were necessary for the divine service; "That they may offer sacrifices of sweet savours unto the GOD OF HEAVEN, and pray for the life of the king and of his sons."

Artaxerxes, a later king of Persia, who continued to confer protection and liberal favours on the Jews, in commissioning Ezra, who is called by the author of the book of the same name, "A scribe of the words of the commandments of the LORD,[5]" presented him with a letter, commencing thus, "Artaxerxes, king of kings, unto Ezra the priest, scribe of the law of the GOD OF HEAVEN"[6]; and further adds, "Whatsoever is commanded by the GOD OF HEAVEN, let it be diligently done for the house of the GOD OF HEAVEN."[7]

Nehemiah in like manner, who had long been a resident at the Persian court, addresses his complaints to the GOD OF HEAVEN.

1 Daniel ii. 47. 2 Daniel iv. 37. 3 Ezra i. 2.
Ezra vi. 10. 5 Ezra vii. 11. 6 Ezra vii. 12. 7 Ezra vii. 23.

It is an interesting fact to find the heathen monarchs of an empire like Persia, according this signal pre-eminence to the God of the Hebrews, and suggests the thought that an influence in that direction had been exerted by the Ten tribes, already long settled in the land. The several expressions above noted and others which might be named, taken in connexion with a remarkable passage in the interpretation of Nebuchadnezzar's dream by Daniel, "Thy kingdom shall be sure unto thee, after that thou shalt have known that the HEAVENS do rule,[1]" point to a usage, traces of which we shall find very general through the kingdoms of Asia in later time. Frequent examples are found in the Apocrypha, as when the third martyr addresses his tormentor, who required him to put out his tongue to be cut off, when holding forth his hands, he said, "These I had from HEAVEN, and for his laws I despise them, and from him I hope to receive them again.[2]" Some two centuries later we observe the same practice in the time of our Saviour, as where the prodigal son is introduced saying, "Father, I have sinned against HEAVEN and in thy sight."[3] The use of this term for God is very common even among the Jews in Europe at the present time, as in the phrase "Do all your works in the name of HEAVEN (God).[4]" It is fair to believe that this practice was introduced by the Israelites in their widely extended settlements.

But proposing to confine our attention for the present to China, with a few preliminary observations on the name which the colony at Kae-fung has retained, we shall proceed to inquire under wha, name God has been worshipped by the Israelites there.

Two agents of the London Missionary Society, who visited these people in 1850, learned that a tradition existed among them that their forefathers were known under the designation of *T'ëen-chuh keaou*, "Indian[5] religion;" but in consequence of a persecution of the sect which took place at some former period, that name had been abandoned.[6] Father Trigault, in his account of the Christian mission to China, published at the beginning of the seventeenth century, states that in his time the Mohammedans, Jews, and Cross-worshippers or ancient Christians, were all known to the Chinese under the general name of *Hwuy-hwuy;* while, for the sake

1 Daniel iv. 26. 2 2 Maccabees vii. 11. 3 Luke xv. 21.

4 Letters édifiantes et curieuses, tom. XVIII. p. 52.

5 Syria appears to have been included by the Chinese formerly under the designation *Tëen-chŭh*, and is no doubt so intended here, although the term is generally translated "India." (See "Letters edifiantes et curieuses," tom. XXIV. p 94)

6 Chinese Repository, vol XX p. 449.

of distinction, the Mohammedans were called "Hwuy who abstain from pork;" the Cross-worshippers were called "Hwuy who abstain from animals without the cloven foot;" and the Jews were called "Hwuy who extract the sinews.[1]" The reason of this common appellation for the three sects was not known; the probability is that it originated in the desire of one or other of the parties to avoid detection during a time of persecution. At present, the name *Hwuy-tszè*, or *Hwuy-hwuy*, is almost exclusively applied to the Mohammedans, though the Jews are also occasionally termed the *Lan maou Hwuy tsze*, or "Blue cap Hwuy-tszè," but the common name of the sect at Kae-fung is *Tsaou-kin keaou*, or "Extract sinew religion." Another fraternal link between the Mohammedans and Jews seems to exist in the name applied to the synagogue, which is inscribed over the front door of the building *Tsing-chin sze*, "Temple of Purity and Truth," being the same name that is used on the Mohammedan mosques in China; and this is not of recent date, for it is found on two old stone inscriptions standing within the precincts of the synagogue, applied to the building that was restored in the thirteenth century. Gozani, who visited them in 1704, calls the synagogue a *Le-pae sze*,[2] which is also the common colloquial name of the mosques. Another designation found on one of the tablets is the *Yih-tszê-lŏ-nëë-keaou*, or "Israelitish religion,[3]" and the synagogue itself is known as the *Yih-tszê-lŏ-nëë-tëen*, "Israelitish Temple;[4]" but the people now are totally ignorant of the meaning of the term themselves; and probably it was never generally known among the outside Chinese.

As to the name used by the people to designate the Supreme, we discover a sufficiently uniform practice in both ancient and modern time. On both the tablets we find the term *Taou* or "Word," equivalent to the *Logos* of the New Testament, applied to Jehovah in a mystical way; but otherwise the use of the word *T'ëën* "Heaven," is universal in the sense of God. Thus in the earlier inscription we read, "The patriarch thinking upon (*T'ëën*) God, the pure and ethereal Being, who dwells on high,"—"He adoringly praised the true (*T'ëën*) God,"—"His piety moved the heart of (*T'ëën*) God,"—"Ezra inculcated the duty of honouring (*T'ëën*) God by ritual worship,"—"Men in their daily avocations must not for a single moment forget (*T'ëën*) God, but at the hours of four in the morning, mid-day, and six in the evening, should thrice perform

11 De Christiana Expeditione apud Sinas, lib. I. p. 123.

12 Chinese Repository, vol. XX. p. 144.

13 Chinese Repository, vol. XX. p. 152.

14 Lettres edifiantes et curieuses, tom. XVIII. p. 34.

their adorations, which is the true principle of the religion of (*T'ëen*) God,"—"Reason (or the Word) is without form or figure, like the Reason of (*T'ëën*) God, exalted on high,"—"He incessantly remembers (*T'ëën*) God,"—"He unfailingly remembers (*T'ëën*) God,"—"But to venerate (*T'ëën*) God, and to neglect ancestors, is to fail in the services which are their due,"—"We reverently pray to (*T'ëën*) God,"—"Every man therefore keeps the laws, and knows how to reverence (*T'ëën*) God."[15] It is needless further to multiply examples; these and other analogous expressions on both the tablets speak very unequivocally of the practice in former times. The phraseology of the various memorial mottoes and stanzas, distributed about the walls of the synagogue, is all in harmony with the above. Gozani says that the sanctuary inside the synagogue is called *T'ëën-t'ang* "House of (*T'ëën*) God," i. e. Beth-el. Their scriptures are called the (*Tëën-king*) 'Divine oracles.' Their religion is called the *T'ëën-keaou*, "Heaven's religion.[16]" Tseang Yung-che, the elder of the agents of the London Society, who visited the synagogue at Kae-fung (in 1851), in giving an account of the sect, states that at the present day, "In addressing God in the Chinese language, they use the word *T'ëën*"; and we have evidence to the same effect from several of the sect who visited Shanghai Gozani says also that they worship God under the name *T'ëën*[17]; and a Memoir on the Jews in China, in the same collection, says, "In translating the name of Jehovah into Chinese, they do not say *T'ëën-choo* like the Missionaries, but simply *T'ëën*, just as the scholars of China do when they explain their term *Shang-ti*.[18]"

We thus observe a growing practice in Western Asia among the Hebrews of designating Jehovah as the God of HEAVEN, and sometimes HEAVEN; and when we find distinct notice in Chinese history of a foreign sect distinguished especially as the worshippers of HEAVEN, spoken of as existing in China at the beginning of the sixth century the suggestion of an identity with the worshippers of the God of HEAVEN in the West presents itself to the mind. This name, as the designation of a foreign sect, is the more remarkable, inasmuch as the state ritual of China has designated the Supreme by the name of HEAVEN, from the earliest time down to the present day. In this latter fact we may possibly have the cause of the HEAVEN worshippers having changed the character by which they were identified; for while the character *T'ëën* was undoubtedly the

15 Chinese Repository, vol. XX. pp. 456—458 passim.

16 Lettres édifiantes et curieuses, tom. XVIII. p. 45.

17 Lettres édifiantes et curieuses, tom. XVIII. p. 36.

18 Lettres édifiantes et curieuses, tom. XXIV. p. 75.

correct etymological representative of their object of worship, yet the vague and materialistic ideas too often attaching to the word in the Chinese mind, would probably lead them to desire that something more of a personal and spiritual nature should be conveyed in the name. That seems to be the idea not inaptly represented by the character invented for the purpose, as will be obvious to any sinologue. Perhaps the fact that the word *T'iĕn* was employed by the Buddhists as the generic term for one of the inferior orders of their objects of worship may not have been without an influence. From whatever cause the character may have been adopted however, the word *Hëĕn* is stated in the dictionaries to be a synonym of *T'iĕn*, 'HEAVEN.' Some indeed give it the same pronunciation, while others state that *Hëĕn* is the local pronunciation in Shen-si for 'HEAVEN.' In connexion with this we may remember that in the early ages, when navigation was a difficult and exceptional method of travelling, the ordinary route for foreigners from the West was by Shen-si, through which province they entered the empire, and where great numbers of them were settled. Assuming then that the *Hëĕn* worshippers are the Israelites, an attempt will here be made to put together in chronological order the principal matters regarding their existence in China, as derived both from native and foreign sources.

According to the testimony of one of the stone tablets in the synagogue at Kai-fung foo, the Israelites first entered China during the Han dynasty;[1] and we are further told in the Letters of the Jesuits that "they came during the reign of Ming-ti (A.D 58-75), from *Si-Yĭh*, i. e. "the Western regions." It appears by all that can be gathered from them, that this Western country is Persia, and that they came by Khorasan and Samarcand. They have many Persian words in their language, and they long preserved a great intercourse with that country."[2]

The *Tung-king ke*, a work of the Sung dynasty, by Sung Tsze-aou, speaking of Pëen-leang; which is the present Kai-fung, says, "In Ning-yuen square there is a *Hëĕn*-spirit monastery;" and adds, "It is traditionally reported that this was erected about the time of the incursion of the Western Tartars during the Tsin dynasty"[3] (third to the fifth century). If this be correct, then it is the earliest location of the sect of which we have any definite mention.

1 Chinese Repository, vol. XX. p. 454.

2 Letters édifiantes et curieuses, tom. XXIV. p. 62.

3 *Si k'i ts'ung yu*, book I. p 18.

In the *Leang king sin ke*[1], we meet the following notice of another of these edifices in the city of Chang-ngan in Shen-si: "At the southwest angle of Poo-ching square[2] is a Foreign *Hëën* chapel." It adds, by way of comment," this was erected in the year A.D. 621. The (*T'ien*) God worshipped by the foreigners of the Western regions is the Maheshwara of the Buddhist Classics." This latter remark will form ground for future discussion. The *Ch'âng-ngan-ché*,[3] commenting on the same notice, says, "the object of worship there is the *T'ien*-spirit of the foreigners from the Western regions. There was an officer called *Sa-paou* who managed the sacred services to the *Hëën*-spirit, and also officially designated a Foreign priest."[4] To this Peïh Yuen adds, "according to the 'complete details regarding the foreign spirit, *Hëën*,'[5] this chapel is stated in the History of the Northern Wei dynasty to have been erected in the time of the Empress dowager Ling, (i. e. in the first half of the sixth century.)" There is an apparent discrepancy here of about a century regarding the erection of this chapel; but probably the two statements may be harmonized by supposing it to have been first built in the sixth century, and the year 621 being the date of its re-erection. On looking over the biography of the empress alluded to in the Wei History, we find it stated that, "Having ascended a lofty hill, attended by several hundred followers, consisting of the imperial consorts, ladies of the palace, princesses and others, she abolished the various corrupt systems of religious worship, excepting that of the foreign *T'ien*-spirit."[6]

The commentary of the *Ch'âng-ngan-ché* gives two of the names of office connected with the religion, "*Sa-paou*" and "Foreign priest." The latter requires no remark, unless perhaps that Rabbi would be quite as appropriate a rendering of the Chinese term. The other, *Sa-paou*, which is not a Chinese word, almost involuntarily suggests the Hebrew *Saupher*, a "Scribe." An attentive reader

1 This work was published by Wei Shuh during the eighth century, only the third out of five volumes is now extant, and that incomplete, but there are considerable extracts from it in the *Ch'âng-ngan-ché*.

2 This was the fourth square from the north, between the first and second streets west from the Imperial city.

3 The *Ch'âng-ngan-ché*, by Mîn-K'ëw of the Sung dynasty, is an elaborate detail in twenty books of the public buildings, boundaries, and a variety of matters relating to Ch'âng-ngan, the Western metropolis of the T'ang dynasty.

4 Book X. p. 2.

5 Unfortunately I have been unable to get any clue to the existence of this work, which would no doubt be of great value in the present inquiry.

6 *Wei shoo*, book XIII. p. 12.

of the New Testament will understand the growing importance of this class of functionaries under the Jewish polity. The following is the concise account of them given in Horne's "Introduction, &c.:"—"There is in the Gospels frequent mention of a set of men called SCRIBES, who are often joined with the chief priests, elders, and Pharisees. They seem to have been men of learning, and on that account to have had great deference paid to them; but, strictly speaking, they did not form any sect. The Scribes generally belonged to the sect of the Pharisees, in whose traditions and explanations of the law they were profoundly skilled; and on the sabbath days 'they sat in Moses' seat' and instructed the people. Originally they had their name from their employment, which at first was transcribing the law: but in process of time they exalted themselves into the public ministry and became teachers of it, authoritatively determining what doctrines were or were not contained in the Scriptures, and teaching the common people in what sense to understand the Law and the Prophets. In short, they were the oracles that were consulted in all difficult points of doctrine and duty; and it is not improbable that they were, for the most part, Levites, whose peculiar business it was to study and read the Law.[1]" We have the most authentic evidence of this class of officers existing among the Israelites in China. A note at the end of the 1st section of the Law[2], is found in the synagogue at Kaifung, a transcript of which was sent to Europe by the Jesuit missionaries, containing the following sentence: "Our master, our rabbi, R. Jacob, son of Abishai, the son of R. Eldad the *(Saupher)* 'Scribe,' and *(melammed)* teacher finished this.[3]" The date of this is about 1620. In a register of the Hebrews resident at Kaifung foo, which was brought to Shanghai in July 1851, and probably dates some time in the 17th century, there are also several mentioned as holding this office. On the first page we have "Rabbi Jeremiah the *(Saupher)* SCRIBE, teacher, Sheloh, the son of Rabbi Akiba the teacher, Sheloh." In the record of the Kaou family we find "Ezekiel, Samuel, Rabbi Issachar, Joseph, sons of Rabbi Mordecai the *(Saupher)* SCRIBE; Joshua, Shalman, Rabbi

1 Vol. III. p. 375.

2 This section, with a great many others, was brought down to Shanghai by the two messengers of the London Society, who visited the colony in 1851. The whole are now deposited in charge of the "Society for the Propagation of Christianity among the Jews," in Lincoln's Inn Fields, London.

3 Finn's 'Jews in China" p. 37. The original Hebrew of this note, with a Latin and French translation, is given in the Prolegomena to Bagster's Polyglott Bible, p. 17.

Mordecai the (*Saupher*) SCRIBE; sons of Simaon." In the Le family are given "Rabbi Reuben the (*Saupher*) SCRIBE, son of Eliezer; Rabbi Ezekiel the (*Saupher*) SCRIBE, son of Rabbi Shelephidim." It is deserving of notice that among the few names of office or dignity, found in the books at Kai-fung, one Rabbi should correspond to the minister of the chapel mentioned in the Chinese work; and another, the (*Saupher,*) to the presiding officer, not only in the station indicated, but almost identical in sound, the difference being not greater than we might look for in a Chinese transfer.

The remaining fragment of the *Lëàng-king sin ké* notices another of these buildings in Châng-ngan, thus: "At the north west corner of Poo-ning square[1] is a *Hëĕn* chapel."

These two are the only buildings of the kind named in the part of the above works that has come down to us, but it gives the following summary of public buildings in the city of Ch'ăng-ngan, "The city contains four Military tribunals, sixty-four Buddhist monasteries, twenty-seven Buddhist nunneries, ten Taouist monasteries, six Taouist nunneries, two Persian temples, and four chapels of the Foreign *Hëĕn* religion."

The *Se-k'e ts'ung-yù* mentions another of these in the same city, thus: "In the year A. D. 631, a teacher of the *Hëĕn*-religion, named *Muh-hoo-ho-lŭh* arrived at the capital, and having presented a memorial to the throne, an Imperial rescript gave orders that a *Hëĕn* monastery should be erected in Tsung-hwa square[2] in Ch'ang-ngan. It was also designated a (*Ta-tsin*) Syrian monastery, and a (*Po-sze*) Persian monastery[3]."

Several of the dictionaries bear witness to the fact of an Imperial officer having been appointed to take charge of matters connected with this body. Yaou-Kwan speaking of this, says, "In a Catalogue of the Imperial officers, I have seen one styled the *Hëĕn*-chief. When the professors of the *Hëĕn* religion first arrived, they were received at the capital as foreigners, according to the rites of the (*Hung-loo she*) 'Guest reception hotel.' Hence in after times the male and female members of their community were subject to the authority of this tribunal; and such is the origin of the appointment of the officer. It was probably about the commencement of the T'ang dynasty that the *Hëĕn*-religion first had a chief[4]." Had

1. This is the third square from the north next the west of the suburban city.

2. This was the seventh square from the north, next the western wall of the suburban city.

3. Book I. p. 18.

4. Book I. p. 18.

any enterprising Israelite traveller left us an account of his visit to China at that early period, many questions connected with these foreign settlers would probably have received a satisfactory explanathion, regarding which we can now only judge from analogy. On this principle, we find it the most natural thing possible that a functionary should be commissioned to superintend the affairs of the Hebrews; as we are actually assured such was the case with the Mohammedans, by one of their countrymen who visited China in the ninth century: "The merchant Soleyman relates, that at Khan-foo, which is the centre of concourse for the merchants, a Mohammedan is appointed by the sovereign to judge all questions that may arise among those of his religion who resort to that country. Such has been the will of the king of China. Upon festival days this man performs religious service with the Mohammedans; he pronounces the *khotba* and makes supplication to Heaven for the Sultan of the Moslems The merchants of Irac are never dissatisfied with his decisions; indeed he acts according to truth, and his decisions are conformable to the book of God (Koran) and the precepts of Islamism.[1]" With this explicit statement before us regarding the Moslems, even were it not expressly declared by the Chinese records, we should be justified in assuming *à priori* that such an officer would be placed over the Israelites.

The sect is named on the *Chung-yen-sze pae*, or "Tablet of the Chung yen Monastery," by *Shoo Yuen-yu*, in the former part of the ninth century, thus: "Among the miscellaneous foreigners who arrived were the Manichæans, the Syrians, and the *Hëĕn* worshippers. The monasteries of these three classes of foreigners throughout the empire are not equal in number to those of our Buddhists in one small district." Tseen Ta-hin, who quotes this, adds—"Now the chapels of the Manichæans and *Hëĕn*-worshippers have long since disappeared, and nothing is known of their origin; while this tablet (the Nestorian inscription at Si-ngan) is the only record which gives any details regarding the Nestorians.[2]" It is not surprising that a writer of the present day should ignore the existence of the Israelites in China, as the few remaining at Kai-fung have scarcely been heard of beyond their immediate vicinity, and are by the Chinese

1 Relation des Voyages faits per les Arabes et les Persans dans l'Inde et a la Chine; traduit par M. Reinaud, Paris, tom. I. p. 13.

2 *Tseen yen tang kin shih wăn pa wĕi suh*, book III. p. 3. This is a work on stone inscriptions, written by *Tsëĕn Ta-hin*, in the early part of the present century.

generally identified with the Mohammedans. Even the *Kai-fung foo chí*, a topographical and historical account of that city, which enters largely and minutely into a description of the public buildings and remarkable objects, makes not the slightest mention of their existence.

The same author, in another work, after quoting the above extract from the tablet, adds: "The Buddhist monasteries were united as one, but these Foreign monasteries were of three kinds; the *Mo-ne* (Manichæans) were the *Mŏ-ne*, the *Ta-tsin* (Syrians) were the *King-keaou* (Nestorians), and the *Hëën-shin* (*Hëën*-spirit worshippers) were *Po-sze* (Persians).[1]" As Persia appears to have been the country by which the Israelites reached China, and this conclusion is supported by the number of Persian words found in their rituals, it is natural that they should be included under this national designation; but it is obvious that the same term sometimes embraced the Parsees, and even the Nestorians.

The numbers of these foreign sectaries must have multiplied greatly during the T'ang dynasty, as we are warranted in believing, from the few indications within our reach. Chinese history informs us that in the year 845 the Emperor Woo-tsung issued an edict for the suppression of Buddhist monasteries, in which he commanded "those of the religious orders belonging to the Nestorians, Mohammedans, Fire-worshippers, *Hëën*-worshippers[2], and others, more than six thousand[3] people in all, to retire into private life[4]."

1. *King keaou kaou.* An investigation of the Nestorian religion, by *Tsëën Tá hin*

2 A modern edition of this edict, published in the *Koo-wan yuen-këën*, gives a different version of this sentence. Its words are *Ta-tsin* (Nestorians) and *Muh-hoo-pa*, of which two proper names the Manchu translation of the same work gives a literal transcript. But the meaning of *Muh-hoo-pa* is not known. Gaubil, in the *Mémories sur les Chinois*, tom. XV, thinks it alludes to the *Mobeds* of Persia, while M. Pauthier recognizes in the name, *Muabar* of Southern India. (See "De l'authenticité de l'inscription Nestorienne de Singan-fou," p. 72.) It is well known to sinologues, however, that there is a great uncertainty in the ancient proper names, as they have been republished in the splendid imperial editions of the present dynasty. This was shown by Klaproth thirty years ago, in a communication to the Journal Asiatique; and it is obvious to any one who has occasion to examine critically the modern editions of historical works where many proper names occur. They are often so disfigured by the improved (!) orthography, that for etymological researches it is necessary to repair to the ancient editions. The quotation given above is from the *Si-ki-ts'ung-yù*, which reads *Ta-tsin* (Nestorians), *Muh-hoo* (Mohammedans), *Ho* (Fire), *Hëen* and others."

3 The *Si-ki-ts'ung-yù* gives *luh-shih*, "sixty," but this is evidently a typographical error for *luh-tsëën*, which by an additional stroke makes "six thousand." The *Koo-wăn yuen-këën* gives *San-tsëën*, "three thousand."

4 *Si-ki-ts'ung-yù* I. p. 19.

What may have been the immediate effect of this edict there are no data to prove; but the probability is that it merely resulted in suppressing the names of the different sects, and the public practice of their ritual services. In 862 we may conclude that some of their adherents stood high in the imperial service[1], and about sixteen years later they were very numerous in some parts of the empire. This we gather from the first account of China by any foreigner from the West, being a narrative by Abou-Zeyd Al-Hassan, an Arab of such things as he had learned from his countrymen who had been there, and appears to have been written in the twelfth century. He says, speaking of a general massacre which took place at Khan-foo in 878; "People who are well informed regarding the affairs of China relate that there perished on this occasion a hundred and twenty thousand Mohammedans, Jews, Christians, and Parsees, who were established in the city, and carried on trade there, besides the number of the natives who were put to death The number of persons of these four religions, who lost their lives, is known, because the Chinese government levied an impost upon them according to their numbers[2]" The last sentence is in admirable agreement with the previous statement, that a superintending officer was placed over the *Hëën* sect by the Chinese government.

In the years 956 and 958 we find tokens of favour conferred on them by the local authorities of Kai-fung foo.[3] The next information we get about this sect is from the tablets in the synagogue, which relate an immigration of seventy families with tribute of Western cloth.[4] The Emperor Heaou-tsung of the Sung dynasty said, "Since they have come to our Central Land, and reverently observe the customs of their ancestors, let them hand down their doctrines at *Pëën-leang* (Kai-fung)." In the year 1163 a synagogue was commenced, and two years later it was finished, at the expense of Yen too-la, while Lie Ching and Woo-sze-ta superintended the religion.[5] Previous to this it would appear, the Israelites in China, like their brethren in western nations, had passed through a season of reverse, and by this special act of imperial clemency the reinforcement was allowed to occupy the place that had been hallowed by the worship of their forefathers.

1 *Mih-chwang-mwán lŭh*, book IV. p. 2.

2 Relation des Voyages faits par les Arabes et les Persans dans l'Inde et à la Chine tom. I. p. 64.

3 *Mih chwang mwán lŭh*, book IV. p. 2.

4 This appears to have been cotton, the plant not having been introduced into China until some centuries later.

5 Chinese Repository, vol. XX. pp. 454, 457.

There is an interesting note in the *Mǐh-chwang-mǎn lǔh*, published about this time, regarding some of these places of worship, the first of which probably refers to the synagogue just mentioned. "On the north side of the city wall of the Eastern capital (Kai-fung), there is a *Hëën*-temple. The *Hëën*-spirit is originally from the (*Se-yǐh*) Western regions. This is a foreign spirit. The adherents came to China with the Nestorians and Mohammedans, and their worship is after the manner of the Parsees. The people in the capital reverence the majesty and intelligence of this spirit, and render to him extreme homage. The minister of the temple is surnamed *She*, with the postnomen *She-chwang*, and says that the office has been hereditary in his family for many generations. Three tablets are preserved there which were presented to them in former times. One, denominated 'Cherishing favour," was given in the year 862, by Ling-hoo, the Military commissioner for Seuen-woo, who was acting as Minister of state. One, denominated 'Soothing,' was given in the year 956, by Wang, the Prefect of Kai-fung, with the authority of Chancellor of the Twan-ming palace. One is denominated 'Noble,' and was given in the year 958, by Wang, the Prefect of Kai-fung, with the authority of Commissioner of the Privy council. From the time of the T'ang dynasty, the *Hëën*-spirit has been worshipped in Pëen, and the ministers may have succeeded each other in the office for two hundred years, which is a remarkable thing. On the city wall, to the east of the Choo-fang Gate of Chin-kiang foo, there is a chapel of the *Hëën*-spirit, but it is not known by whom it was erected.[3]"

Two other chapels of the sect in Ch'ang-ngan are named in the *C'hang-ngan che*, but without anything to denote the time of their foundation: "On the west side of the south street dividing the Tsing-kung square[3] is a *Hëën*-chapel.[4]"

"To the south of the Western gate of Le-tseuen square[5] is a *Hëën* chapel.[6]"

In 1279, one of the tablets informs us, the ancient synagogue in the south-eastern part of Too-shǐh-tsze street was rebuilt by the

1 This is a miscellaneous collection of facts, in ten books, supplementary to the national histories, by *Chang P'ang-ke*, and evinces much depth of research.

2 Book IV. p. 2.

3 This was the seventh square from the north, against the east wall of the suburban city.

4 Book IX. p. 4.

5 This was the fourth square from the north, on the west side of the second street west from the imperial city.

6 Book X. p. 6.

Woo-sze-ta, covering an area of 350 feet square;[1] being probably the restoration of one of the edifices originally established under a former dynasty.

From some incidental remarks in Marco Polo's Travels, we learn that the Jews were sufficiently numerous about this time to assert a political influence in China and Tartary. Speaking of the Tartar prince Nayan in 1286, who had a vast number of Christians in his army, he continues: "When the Jews and Saracens perceived that the banner of the cross was overthrown, they taunted the Christian inhabitants with it, saying, 'Behold the state to which your (vaunted) banners, and those who followed them, are reduced!'"[2] In the following chapter, speaking of the rites with which Kubla honoured the Christian festivals at Kanbalu (Peking), he adds: "And he observed the same at the festivals of the Saracens Jews, and idolaters. Upon being asked his motive for this conduct, he said: 'There are four great Prophets who are reverenced and worshipped by the different classes of mankind. The Christians regard Jesus Christ as their divinity; the Saracens, Mahomet; the Jews, Moses; and the idolaters, Sogomombarkan[3], the most eminent amongst their idols. I do honour and show respect to all the four, and invoke to my aid whichever amongst them is in truth supreme in heaven.'"[4] "This conduct," remarks Mr. Wright, "towards the professors of the several systems of faith is perfectly consistent with the character of Kubla, in which policy was the leading feature. It was his object to keep in good humour all lasses of his subjects, and especially those of the capital or about the court, by indulging them in the liberty of following unmolested their own religious tenets, and by flattering each with the idea of possessing his special protection."[5] And the rebuilding of the synagogue above noticed was probably a result of his toleration and patronage.

Towards the close of the same dynasty we have the testimony of Ibn Batuta, the Arabian envoy, as to the existence of the Jews in China about the year 1346. In his account of the city of Khansa (Hang-chow), he remarks: "In the second division are the Jews, Christians, and the Turks who worship the sun: these are numerous, their number is not known: and theirs is the most beautiful city.

1 Chinese Repository, vol. XX. p. 457.

2 Marsden's Translation, edited by Thomas Wright, London, 1854, p. 166.

3 This word is obviously an erroneous transcript of Shigamouni borkhan, Shakye mouni Buddha (our God).

4 Travels of Marco Polo, pp. 167, 168.

5 Travels of Marco Polo, p. 167.

Their streets are well disposed, and their great men are exceedingly wealthy."[1]

The privileges of this people seem to have been ratified to them on the accession of the Ming dynasty, in the latter half of the fourteenth century, at which time they had a good number of *mullahs* or teachers among them; and a commission from among these was appointed to take charge of and manage the affairs of the synagogue in Kai-fung.[2]

In 1421 the building was repaired under imperial patronage, and the imperial tablet or *Wan-suy pai* of the Ming dynasty was placed in the hall of worship, a commissioner having been sent to burn incense there. Two years later, one of the fraternity received a high military commission. In 1445 the front portion of the establishment was rebuilt, but a flood that occurred in 1461, from the overflowing of the Yellow River, almost destroyed the whole building. It was again restored by official permission, and an additional portion was annexed to it, in the latter half of the fifteenth century. Families of Israelites must have been living in other parts of China at that time, in the full enjoyment of their religious privileges, as we find they were able to procure rolls of the Law from Ning-hea and Ningpo, in place of those that had been destroyed by the flood; and they appear to have had establishments also at Hang-chow and Peking.[3] In 1489 the building was entirely renewed, a record of which event is preserved on a stone erected the same year.

Another stone tablet still remains within the enclosure, dated 1512, giving a general outline of the religious views of the residents at that period; forming a traditional memento of singular interest, as surviving the influence of centuries of heathen contact.

At the close of the sixteenth century they were again deprived of their books by a fire, and the loss was in part supplied by the purchase of a roll of the Law from a Mohammedan at Ning-kiang chow in Shen-si, who had received it by legacy from a dying Israelite at Canton; and from this Hebrew roll they were able to make several copies. The synagogue was rebuilt by one of the fraternity, of the surname Chaou, at that time magistrate of a district city.

We have allusion to the Israelites in China about this time in the Relation of Galeotta Perera, an Italian gentleman, who was

1 Travels of Ibn Batuta, Lee's translation, p. 217.

2 Chinese Repository, vol XX. p. 457.

3 Letters edifiantes et curieuses, tom. XXIV. p. 62.

many years a prisoner in the country. Speaking of the administration of justice there, he says: "The Moores, Gentiles, and Jewes have all their sundry othes, the Moores do sweare by their Mossafos, the Brachmans by their Fili, the rest likewise by the things they do worship:"[1]

A native cyclopædia, published about this period, speaks of eight different systems of Astronomy promulgated at various times in China, the last named being "denominated the 'Four heavens,' a theory introduced by the *Hëën* foreigners."[2] It appears extremely probable that the Jews would bring with them from the West some of the astronomical notions current in the countries where they had been residing. Noticing the wealth and influence of those who had settled in Bagdad, Renaudot tells us: "They thrived by various means; many of them cultivated the sciences, particularly Philosophy, Astronomy, and Physic."[3]

It was not many years after the conflagration above mentioned, that the Jesuits, who had newly obtained a residence in Peking, became acquainted with the existence of the Jewish settlement in Kai-fung, by one of the Hebrews having come to Peking to procure literary honours. He stated that in his native city there were ten or twelve families of Israelites, with a fair synagogue, which they had recently restored and decorated at an expense of ten thousand crowns, and in which they preserved a roll of the Law, four or five hundred years old; adding, that in Hang-chowfoo, the capital of Che-kiang, there were considerably more families and a synagogue; and that there were many in other parts of the country: but these having no synagogue, their religion was gradually becoming extinct. This last statement harmonises well with what Semedo learned while residing in Nanking. He was there informed by a Mohammedan that in that city he knew of four families of Jews who had embrace l the religion of the Koran, they being the last of their race there, and their instructors having failed as their numbers diminished.

The first European we hear of having visited the Kai-fung synagogue was Jules Aleni, in 1613; but although he confirmed what was previously ascertained, he added little new information.

1 The Principal Navigations, Voyages, Traffiques and Discoveries of the English Nation by Richard Hakluyt, vol. II. part ii. p 73.

2 *San-tsai t'oô-hwúy.* Astronomical section, p. 2.

3 Ancient Accounts of India and China, from the French of Renaudot. Appendix, p. 190.

In 1642 the synagogue was again devastated by the overflowing of that scourge of Honan, the Yellow River, when a great number of their books were destroyed or washed away; and this being followed within a short period by the investment of the city of Kai-fung, at the establishment of the present dynasty, the resident Israelites became completely dispersed for the time; but members of seven of the clans returned to their ancient patrimony soon afterwards, these being commonly designated the seven clans of *Hway-tsze*.

During the eighteeth century several Europeans were admitted within the synagogue, but the most circumstantial account we have is from the pen of Father Gozani. From his statement we gather that a commendable spirit of enterprise had been exhibited by the remaining families, in having restored the edifice, and procured thirteen complete copies of the Pentateuch on rolls of skin. The several mural legends also which still exist, bearing date at various times from 1657 down to 1797, would seem to indicate a regard on the part of the Israelites for the sanctity of the place.

A recent notice of the existence of the *Hëĕn* religion is found in the *Shanghai hiĕn che*.[1] In the Biographical section of that work we read, "Chang Wei-chung, cognomen Leĭh-jin, epithet Shĭh-heu, obtained the degree of Tsinsze (LL.D.) at Suen-hwa in the year 1779. He was afterwards Mayor of Shay-hung in Sze-chuen, where, by his economy, prudence, and benevolence, he was reputed the best magistrate in that part of the country. The *Hĭĕn*-worship being prevalent in that district, an impostor claiming supernatural powers appeared among them, raising subscriptions for the restoration of a temple, by whom the preceding district magistrate had been imposed upon. But Wei-chung meeting his pretensions with severe personal chastisement, his influence gradually became extinct,"[2]

In 1777 and 1779 successively, the oriental scholar Olave Gerhard Tychsen sent Hebrew letters to the Jews at Kai-fung, through some friends in Batavia, but it is not known if these ever reached their destination. In 1815, Dr. Morrison forwarded to them a Hebrew letter from some Jews in London, which there is good reason to believe they retained possession of, although since that time there has been no one sufficiently skilled in Hebrew to

1 This is a topographical account of the district of Shanghai, comprising history, antiquities, institutions, men of note, &c.

2 Book XIII. p 48.

read it. In 1850 another Hebrew letter, accompanied by a communication in Chinese, was forwarded to them by Mr. Layton the British Consul at Amoy. This was received,[1] but the fear of the authorities knowing that they had any correspondence with foreigners, prevented them taking any notice of it in reply.

The most recent information procured regarding this colony is the result of a deputation despatched at the instance of the London Society for promoting Christianity among the Jews, two Chinese having been specially commissioned to visit them on two occasions in 1850, for the purpose of obtaining all possible information regarding them. The result of their inquiries confirmed in every respect the previous accounts; representatives of the seven clans were said to be still there, but to all appearance the community was reduced to a deplorable state of poverty; for fifty years they had been without a rabbi, and their condition indicated a state of decline threatening a rapid extinction of the sect. The synagogue still remained with its various appurtenances, but the ravages of time were apparent in its hastening dilapidation; the rolls of the Law on sheep-skin and the smaller rituals were still preserved, but they were now a dead letter to the remaining Israelites: some of these were purchased for the Society in London. Some of the members of this community have on several occasions since visited Shanghai. Within the past few years the city of Kai-fung has been repeatedly visited by rebel bands, whose incursions have spread desolation and misery among the inhabitants. Report says that the Israelite remnant is again dispersed, and that their interesting literary relics have been carried with them to different parts of the country. Another visit to the establishment by some European might succeed in obtaining further light regarding their past history, and the prospect of their future return to the same locality. Should the present be the ultimate dispersion of the community, and the ancient synagogue be removed, or adapted to some idolatrous use, so scanty and indefinite are the notices of this people in the native literature, that the fact of their ever having been in China will soon be unknown among the natives except to some few archæological investigators; and were it not for the circumstantial statements which have of late years been given to the public, many Europeans would be ready to place the accounts of their residence in China among the incredible marvels of oriental travellers.

1 It is now in the possession of the "Society for the Propagation of Christianity among the Jews," at their establishment in Lincoln's Inn Fields, London.

Ill-informed and indifferent as Chinese authors generally are with regard to foreign religions, it is not surprising to find them at a loss to know what system to refer the *Hëĕn*-religion to; and we do not find unanimity among those who have ventured to speculate on the subject.

Yaou-Kwan says it is the Parsee faith.[1]

The "Catalogue of Books in the Imperial Library,"[2] drawn up and published under the superintendence of the Emperor, during the K'ien-lung period, asserts that it is identical with the Nestorian religion of the T'ang dynasty, and the Roman Catholic of modern times, But were there no other objection to that view, the date of its existence in China is sufficient to refute it.

In recent times, we have the opinion of a Chinese scholar who is perhaps better qualified than most of his countrymen to speak on the subject. The late Lieutenant-governor of Fŭh-kiĕn, Seu Ke-yu, in his "Geography of Foreign Countries,"[3] has the following remarks, which are deserving of attention; "From Judea westward, the nations all worship the *T'ien*-(Heaven)-spirit. This worship originated with Moses, about the time of the commencement of the Shang dynasty. It is said that the *T'ien*-spirit descended on Mount Sinai, and gave ten commandments for the guidance of mankind; whence originated the appointment of the seventh day for rest and worship, being a thousand and several hundred years before the birth of Christ. This then is the source whence the Roman Catholic religion took its rise, but it is not identical with the Roman Catholic religion. From the time of the former five dynasties there have been chapels of the *Heen* spirit in China. There were also chapels of the (*Hoo*) Foreign *Heen*, and the (Hò) Fire *Heen*. We find this character *Heen* is compounded of the two characters *she* (spiritual influence) and *t'ien* (heaven), equivalent to the *T'ien*-(Heaven)-spirit. This religion took its rise in Judea, on the eastern border of the Roman empire. The designation 'Foreign-*Heen*' is the same as the '*Heen*-spirit.' The '*Hëen*-spirit' is the same as the *T'ien*-spirit,' and appears to belong to the Roman empire. This was the foreshadow of the Christian religion. As to the 'Fire spirit'

1 *Si k'e ts'ung yŭ*, book I. p. 19.

2 *Kin-ting sze-koo tseuen-shoo tsung-muh* book CXXV p. 33.

3 *Ying hwan chè lëŏ*. In this compendious sketch of outside nations, the author has taken the advantage of his opportunities for consulting foreigners regarding foreign affairs, which he freely acknowledges, and impartially uses the information thus derived.

(Parsee) religion, it came from Persia, and had no connexion with the Roman empire. Calling this by the name 'Fire-*Hëen*' is confounding in one the two names (*Hò-shin*) 'Fire-spirit,' and (*T'ien-shin*) 'Tien-spirit.' To say that the Persian (Parsee) religion came from the Roman empire is like tracing out one's own family connexions in a strange clan."[1] It is not a little remarkable how distinctly this author alludes to the Israelites here as a separate sect, although apparently he had no knowledge of the existence of a synagogue and settlement at Kai-fung foo, for while treating of various foreign religions in China, he does not once allude to this throughout his work.

In view of the various facts and opinions, which have been thus brought together from native and foreign sources, there does appear to be good ground for concluding that the *Heen*-worship in China was that of the Hebrews. Apart from the other evidence, it should be borne in mind that a certain number of foreign religions are named in the Chinese books, and that these just agree in number with those that we know from other sources to have entered China. The Mohammedans, Manichæans, Parsees, and Nestorians, we can clearly identify. But the Israelites, we have reason to believe, were much more numerous than some of these others, and have remained in China through a long succession of ages; is it probable that they alone should be omitted, when all other sects were named? If they have been entirely omitted, then the name of a foreign religious body, the *Hëen*-worshippers, alone remains unidentified. The two negative suppositions imply a strong positive, and—to use a Chinese metaphor—"unite like the two parts of a signet."

1 Book III. p. 37.

THE NESTORIAN TABLET IN SI-NGAN FOO.*

More than two centuries have now passed away, since the Jesuit fathers announced to the world, the discovery of a marble tablet in 1625, recording the establishment of the Christian religion in China during the T'ang dynasty (7th and 8th centuries). This was said to have been discovered by the Chinese, while digging for the foundation of a house at a village not far distant from the city of Si-ngan. The first foreigner who saw it after its exhumation was Alvarez Semedo, who gives the following account in his Relatione della Grande Monarchia della Cina.[1] "Three years afterwards, in "the year 1628, some fathers entered this province by favour of a "Christian Mandarin, named Phillip, who was going in that "quarter. The same fathers obtained (by favour and authority of "this same Mandarin) the privilege of erecting a house and building "a Church for practising the exercises of our religion in the "Metropolitan city of Si-ngan foo; where God by his infinite mercy, "has been pleased to exhibit a memento so authentic of the sub-"mission of this country to his law; in order thus to employ it "anew, and by that means facilitate the worship of his name, and "the introduction of his gospel. I was permitted to be one of the "first to inhabit this dwelling; in which I considered myself "fortunate; because I had the opportunity of going to see the "stone; which I went to visit as soon as I arrived without caring "for anything else. I have seen and read it, re-read and considered "it, at leisure and in quietness; in fine, I examined it so attentively, "that I could not restrain my admiration of its antiquity, and my "astonishment at seeing the characters, so visible, so clean, and "well engraved, that one might have said they were but just formed. "There are several Chinese characters on the left hand edge of the

[1] Not having the original of this work at hand, the extract we quote is taken from Kircher's Chine Illustrée.

"tablet, containing the names of several Bishops and Priests of that "period; there are also some other characters, which up to the "present time no one has been able to explain: for they are neither "Greek nor Hebrew, and which nevertheless (in my opinion) "signify nothing else than the same names; so that these different "characters are used merely to make known to travellers and "foreigners, that which the commonly used characters make known "to the people of China. After this, taking a journey by Cochin, "I arrived at Cranganor, which is the residence of the Archbishop "of the coast, where I consulted the Father Anthony Fernandez of "our company on this matter; because he is very clever respecting "the letters that have been used since the time of the Apostle "Thomas, and he told me they were Syriac characters; for they "were most in use at that time." Martin Martini, Michel Boime and others of the time followed with testimony to the same effect. The high colouring, however, which some of that fraternity had been in the habit of giving to matters of which they treated, raised a natural suspicion among many against every statement which emanated from them. That these suspicions were in many instances, if not unfounded, at least allowed to reach an undue magnitude, subsequent events have clearly proved. Under such circumstances it is not surprising that scepticism was on the alert, and that from various motives, ingenuity was exercised to detect some deception or to hit upon some means of nullifying the testimony in favour of this discovery. Among the most talented opponents were Bishop Horne, Spizelius, LaCroze and Voltaire. Most writers on China since their time have noticed this monument at greater or less length. It is to be regretted, however, that from the conflicting statements which have been set forth, some of our greatest church historians have been left in doubt on the subject, and the question having been recently revived among the savants in America, E.E. Salisbury Professor of Arabic and Sanscrit in Yale college U. S. has issued a paper commencing with the startling statement of his opinion, "that the Nestorian monument is now generally regarded by the learned as a forgery." This may form our apology for a few remarks, which we shall preface with a translation of this famous inscription, differing in some respects from those that have been hitherto given.

Tablet eulogizing the propagation of the Illustrious Religion in China, with a preface composed by King-tsing, a priest of the Syrian Church.

Behold the unchangeably true and invisible, who ex s ed through all eternity without origin; the far-seeing perfect intel-

ligence, whose mysterious existence is everlasting; operating on primordial substance he created the universe, being more excellent than all holy intelligences, inasmuch as he is the source of all that is honourable. This is our eternal true lord God, triune and mysterious in substance. He appointed the cross as the means for determining the four cardinal points, he moved the original spirit and produced the two principles of nature; the sombre void was changed and heaven and earth were opened out; the sun and moon revolved, and day and night commenced; having perfected all inferior objects, he then made the first man; upon him he bestowed an excellent disposition, giving him in charge the government of all created beings; man acting out the original principles of his nature, was pure and unostentatious; his unsullied and expansive mind, was free from the least inordinate desire; until Satan introduced the seeds of falsehood, to decorticate his purity of principle; the opening thus commenced in his virtue gradually enlarged, and by this crevice his nature was obscured and rendered vicious; hence three hundred and sixty five sects, followed each other in continuous track, inventing every species of doctrinal complexity; while some pointed to material objects as the source of their faith, others reduced all to vacancy, even to the annihilation of the two primeval principles; some sought to call down blessings by prayers and supplications, while others by an assumption of excellence held themselves up as superior to their fellows; their intellects and thoughts continually wavering, their minds and affections incessantly on the move; they never obtained their vast desires, but being exhausted and distressed they revolved in their own heated atmosphere; till by an accumulation of obscurity they lost their path, and after long groping in darkness they were unable to return. Thereupon our Trinity being divided in nature, the illustrious and honourable Messiah, veiling his true dignity, appeared in the world as a man; angelic powers promulgated the glad tidings, a virgin gave birth to the Holy One in Syria; a bright star announced the felicitous event, and Persians observing the splendour came to present tribute; the ancient dispensation as declared by the twenty-four holy men was then fulfilled, and he laid down great principles for the government of families and kingdoms; he established the new religion of the silent operation of the pure spirit of the Triune, he rendered virtue subservient to direct faith; he fixed the extent of the eight boundaries, thus completing the truth and freeing it from dross; he opened the gate of the three constant principles, introducing life and destroying death; he suspended the

bright sun to invade the chambers of darkness, and the falsehoods of the devil were thereupon defeated; he set in motion the vessel of mercy by which to ascend to the bright mansions, whereupon rational beings were then released; having thus completed the manifestation of his power, in clear day he ascended to his true station. Twenty-seven sacred books have been left, which disseminate intelligence by unfolding the original transforming principles. By the rule for admission, it is the custom to apply the water of baptism; to wash away all superficial show, and to cleanse and purify the neophytes. As a seal they hold the cross, whose influence is reflected in every direction uniting all without distinction. As they strike the wood, the fame of their benevolence is diffused abroad; worshipping towards the east, they hasten on the way to life and glory; they preserve the beard to symbolize their outward actions, they shave the crown to indicate the absence of inward affections; they do not keep slaves, but put noble and mean all on an equality; they do not amass wealth, but cast all their property into the common stock; they fast in order to perfect themselves by self-inspection; they submit to restraints, in order to strengthen themselves by silent watchfulness; seven times a day they have worship and praise, for the benefit of the living and the dead; once in seven days they sacrifice to cleanse the heart and return to purity.

It is difficult to find a name to express the excellence of the true and unchangeable doctrine; but as its meritorious operations are manifestly displayed, by accommodation it is named the Illustrious religion. Now without holy men, principles cannot become expanded, without principles, holy men cannot become magnified; but with holy men and right principles, united as the two parts of a signet, the world becomes civilized and enlightened.

In the time of the accomplished emperor Tae-tsung, the illustrious and magnificent founder of the dynasty, among the enlightened and holy men who arrived, was the Most Virtuous Alopun from the country of Syria. Observing the azure clouds, he bore the true Sacred books; beholding the direction of the winds, he braved difficulties and dangers. In the year A.D. 635, he arrived at Chang-ngan; the Emperor sent his prime minister, Duke Fang Heuen-ling; who carrying the official staff to the west border, conducted his guest into the interior: the Sacred books were translated in the imperial library, the sovereign investigated the subject in his private apartments; when becoming deeply impressed with the rectitude and truth of the religion, he gave special orders for its dissemination.

In the seventh month of the year A.D. 639, the following imperial proclamation was issued :—

"Right principles have no invariable name, holy men have no "invariable station; instruction is established in accordance with the "locality, with the object of benefiting the people at large. The "Greatly Virtuous Alopun of the kingdom of Syria, has brought "his Sacred books and images from that distant part, and has pre- "sented them at our chief capital. Having examined the principles "of this religion, we find them to be purely excellent and natural; "investigating its originating source, we find it has taken its rise "from the establishment of important truths; its ritual is free from "perplexing expressions, its principles will survive when the frame- "work is forgot; it is beneficial to all creatures, it is advantageous "to mankind. Let it be published throughout the empire, and let "the proper authority build a Syrian church in the capital in the "E-ning Way, which shall be governed by twenty one priests. "When the virtue of the Chow dynasty declined, the rider on the "azure ox ascended to the west; the principles of the great T'ang "becoming resplendent, the Illustrious breezes have come to fan "the east."

Orders were then issued to the authorities, to have a true portrait of the emperor taken; when it was transferred to the wall of the church, the dazzling splendour of the celestial visage irradiated the Illustrious portals. The sacred traces emitted a felicitous influence, and shed a perpetual splendour over the holy precincts. According to the Illustrated Memoir of the Western Regions, and the historical books of the Han and Wei dynasties the kingdom of Syria reaches south to the Coral sea; on the north it joins the Gem Mountains; on the west it extends towards the borders of the immortals and the flowery forests; on the east it lies open to the violent winds and tideless waters. The country produces fire-proof cloth, life restoring incense, bright moon pearls, and night lustre gems. Brigands and robbers are unknown, but the people enjoy happiness and peace. None but illustrious laws prevail; none but the virtuous are raised to sovereign power. The land is broad and ample, and its literary productions are perspicuous and clear.

The emperor Kaou-tsung respectfully succeeded his ancestor, and was still more beneficent towards the institution of truth. In every province, he caused Illustrious churches to be erected, and ratified the honour conferred upon Alopun; making him the Great conservator of doctrine for the preservation of the state. While this doctrine pervaded every channel, the state became enriched, and tranquility abounded. Every city was full of churches, and the

royal family enjoyed lustre and happiness. In the year A.D. 699, the Buddhists gaining power raised their voices in the eastern metropolis; in the year A.D. 713, some low fellows excited ridicule, and spread slanders in the western capital. At that time there was the chief priest Lo-han, the Greatly Virtuous Kie-leih, and others of noble estate from the golden regions, lofty minded priests, having abandoned all worldly interests, who unitedly maintained the grand principles, and preserved them entire to the end.

The high principled emperor Heuen-tsung caused the Prince of Ning and others, five princes in all, personally to visit the felicitous edifice; he established the place of worship; he restored the consecrated timbers which had been temporarily thrown down; and re-erected the sacred stones which for a time had been desecrated.

In 742, orders were given to the great general Kaou Leih-ze, to send the five sacred portraits (of the T'ang emperors), and have them placed in the church, and a gift of a hundred pieces of silk accompanied these pictures of intelligence. Although the dragon's beard was then remote, their bows and swords were still within reach; while the solar horns sent forth their rays, the celestial visages seemed close at hand.

In 744, the priest Keih-ho in the kingdom of Syria, looking towards the star (of China) was attracted by its transforming influence, and observing the sun (i.e. emperor), came to pay court to the most honourable. The emperor commanded the priest Lo-han, the priest Poo-lun and others, seven in all, together with the Greatly Virtuous Keih-ho, to perform a service of merit in the Hing-king palace. Thereupon the emperor composed mottoes for the sides of the church, and the tablets were graced with the royal inscriptions; the accumulated gems emitted their effulgence, while their sparkling brightness vied with the ruby clouds; the transcripts of intelligence suspended in the void, shot forth their rays as reflected by the sun; the bountiful gifts exceeded the height of the southern hills; the bedewing favours were deep as the eastern sea. Nothing is beyond the range of right principle, and what is permissible may be identified; nothing is beyond the power of the holy man, and that which is practicable may be related.

The accomplished and enlightened emperor Suh-tsung rebuilt the Illustrious churches in Ling-woo and four other places; great benefits were conferred and felicity began to increase, great munificence was displayed and the imperial state became established.

The accomplished and military emperor Tae-tsung magnified the sacred succession, and honoured the latent principle of nature;

always on the incarnation day, he bestowed celestial incense, and ordered the performance of a service of merit; he distributed of the imperial viands, in order to shed a glory on the Illustrious congregation. Heaven is munificent in the dissemination of blessings, whereby the benefits of life are extended; the holy man embodies the original principle of virtue, whence he is able to counteract noxious influences.

Our sacred and sagelike, accomplished and military emperor Kien-chung, appointed the eight branches of government, according to which he advanced or degraded the intelligent and dull; he opened up the nine categories, by means of which he renovated the illustrious decrees, his transforming influence pervaded the most abstruse principle, while openness of heart distinguished his devotions. Thus by correct and enlarged purity of principle, and undeviating consistency in sympathy with others; by extended commiseration, rescuing multitudes from misery, while disseminating blessings on all around; the cultivation of our doctrine gained a grand basis, and by gradual advances its influence was diffused. If the winds and rains are seasonable, the world will be at rest; men will be guided by principle, inferior objects will be pure; the living will be at ease, and the dead will rejoice; the thoughts will produce their appropriate response, the affections will be free, and the eyes will be sincere; such is the laudable condition, which we of the Illustrious religion are labouring to attain.

Our great benefactor, the Imperially conferred purple gown priest E-sze, titular Great statesman of the Banqueting house, Associated secondary Military commissioner for the Northern Region, and Examination Palace Overseer, was naturally mild and graciously disposed; his mind suceptible of sound doctrine, he was diligent in the performance; from the distant city of Radjagriha, he came to visit China; his principle more lofty than those of the three dynasties, his practice was perfect in every department; at first he applied himself to duties pertaining to the palace, eventually his name was inscribed on the military roll. When the Duke Koh Tsze-e, secondary minister of state, and prince of Fun-yang, at first conducted the military in the northern region, the emperor Suh-tsung made E-sze his attendant on his travels; although he was a private chamberlain, he assumed no distinction on the march; he was as claws and teeth to the duke, and in rousing the military, he was as ears and eyes; he distributed the wealth conferred upon him, not accumulating treasure for his private use; he made offerings of the jewelry which had been given by imperial

favour; he spread out a golden carpet for devotion: now he repaired the old churches, anon he increased the number of religious establishments; he honoured and decorated the various edifices, till they resembled the plumage of the pheasant in its flight; moreover practising the discipline of the Illustrious religion, he distributed his riches in deeds of benevolence; every year he assembled those in the sacred office from four churches, and respectfully engaged them for fifty days in purification and preparation; the naked came and were clothed; the sick were attended to and restored; the dead were buried in repose; even among the most pure and self-denying of the Buddhists, such excellence was never heard of; the white-clad members of the Illustrious congregation, now considering these men, have desired to engrave a broad tablet, in order to set forth a eulogy of their magnanimous deeds.

ODE.

The true Lord is without origin,
Profound, invisible and unchangeable;
With power and capacity to perfect and transform,
He raised up the earth and established the heavens.

Divided in nature, he entered the world,
To save and to help without bounds;
The sun arose, and darkness was dispelled,
All bearing witness to his true original.

The glorious and resplendent accomplished emperor,
Whose principles embraced those of preceding monarchs,
Taking advantage of the occasion, suppressed turbulence,
Heaven was spread out and the earth was enlarged.

When the pure bright Illustrious religion,
Was introduced to our T'ang dynasty,
The Scriptures were translated and churches built,
And the vessel set in motion for the living and the dead.
Every kind of blessing was then obtained,
And all the kingdoms enjoyed a state of peace.

When Kaou-tsung succeeded to his ancestral estate,
He rebuilt the edifices of purity;
Palaces of concord large and light,
Covered the length and breadth of the land.

The true doctrine was clearly announced,
Overseers of the church were appointed in due form;
The people enjoyed happiness and peace,
While all creatures were exempt from calamity and dis-[tress.

When Heuen-tsung commenced his sacred career,
He applied himself to the cultivation of truth and recti-[tude;
His imperial tablets shot forth their effulgence,
And the celestial writings mutually reflected their splen-[dours.

The imperial domain was rich and luxuriant,
While the whole land rendered exalted homage;
Every business was flourishing throughout,
And the people all enjoyed prosperity.

Then came Suh-tsung, who commenced anew,
And celestial dignity marked the imperial movements;
Sacred as the moon's unsullied expanse,
While felicity was wafted like nocturnal gales.

Happiness reverted to the imperial household,
The autumnal influences were long removed;
Ebullitions were allayed, and risings suppressed,
And thus our dynasty was firmly built up.

Tae-tsung the filial and just;
Combined in virtue with heaven and earth;
By his liberal bequests, the living were satisfied,
And property formed the channel of imparting succour.

By fragrant mementoes he rewarded the meritorious,
With benevolence, he dispensed his donations;
The solar concave appeared in dignity,
And the lunar retreat was decorated to extreme.

When Kien-chung succeeded to the throne,
He began by the cultivation of intelligent virtue;
His military vigilance extended to the four seas,
And his accomplished purity influenced all lands.

His light penetrated the secrecies of men,
And to him the diversities of objects were seen as in a [mirror;
He shed a vivifying influence through the whole realm
And all outer nations took him for example. [of nature,

The true doctrine how expansive!
Its responses are minute;
How difficult to name it!
To elucidate the three in one.

The sovereign has the power to act,
While the ministers record;
We raise this noble monument,
To the praise of great felicity.

This was erected in the 2nd year of Kien-chung of the T'ang dynasty (A.D. 781) on the 7th day of 1st month, being Sunday.

Written by Lew Sew-yen, Secretary to the Council, formerly Military superintendent for Tae-chow; while the Bishop Ning-shoo had the charge of the congregations of the Illustrious religion in the east.

The above translation has been made with the assistance of two fac-simile impressions taken from the stone. The two lines of Syriac, of which the following is a transcript, are in Estrangelo character, and run down the right and left sides of the Chinese respectively:—

Adam, Kasiso Vicar-apishupo wa papasi de Zinstan
Bajumi aba dabahotha Mar Hana Jesua katholiko Patriarchis

Kircher translates this as follows;—

"Adam Deacon Vicar-episcopal and Pope of China."

"In the time of the Father of Fathers, the Lord John Joshua, the Universal Patriarch."

Having been unable to procure an impression of the Syriac at the foot, as it appears to be on a different facing of the stone, we give the transcript here on the authority of Kircher:—

Besanath alf etisa.in etartin diavanaie Mar Jidbuzad Kasiso Vcurapishupo de Cumdan medinath malcutha har nikh napso Milis Kasiso dmen Balekh medinath de Tahharstan Akim Lukho hono Papa dictaben beh medabarnutho dpharukan Vcuruzuthon dabhain dalmat malche dzinio.

"In the year of the Greeks, one thousand and ninety-two, the Lord Jazedbuzid Priest and Vicar-episcopal of Cumdan the royal city, son of the enlightened Mailas, Priest of Balach a city of Turkestan set up this tablet, whereon is inscribed the Dispensation of our Redeemer, and the preaching of the apostolic missionaries to the king of China."

After this, in Chinese characters is—"The Priest Ling paou."

Adam meschamschono Bar Jidbuzad Curapishupo.
Mar Sargis Kasiso, Vcurapishupo.
Sa'ar Jesua Kasiso.

Gabriel Kasiso Varcodiakun, Vrisch medintho de Cumdan udasrag.

"Adam the Deacon, son of Jazedbuzid, Vicar-episcopal.

"The Lord Sergius, Priest and Vicar-episcopal.

"Sabar Jesus, Priest

"Gabriel, Priest, Archdeacon, and Ecclesiarch of Cumdan and Sarag."

The following subscription is appended in Chinese:—

"Assistant Examiner: the high statesman of the Sacred rites, the Imperially-conferred purple gown Chief Presbyter, and Priest Ye-le."

On the left hand edge are the Syriac names of 67 priests, and 61 are given in Chinese.

In summing up the evidence pro and con for the genuineness of this tablet, Professor Salisbury remarks "that there is no intrinsic improbability in the account of the discovery; but, inasmuch as it is not known that any one has pretended to have seen the original monument, during the last two centuries, and as the state of preservation of the inscription and the condition of the tablet might prove an important source of inference as to its being genuine, it is essential to a full belief in the story, that the monument be seen by some disinterested person, at the present day."[1] It makes very little for the argument one way or other, that we have no notice of it having been seen by a foreigner for two centuries, considering we have never heard of any foreigner having visited the locality during the period stated. Should a visit to the spot indicated prove a failure in discovering its existence, suspicion would in that case be well founded. But although no foreigner may have seen it of late, we have abundant evidence that it has been seen, read, examined and criticised by natives in no way prejudiced in favour of the religion it professes to make known, fully competent, and thoroughly disposed to detect any indication of fraud, did such exist; but although they have made fac-similes, although they have printed, published and

1 At a meeting of the American Oriental Society, held in October last, on the motion of the Corr. Secretary, seconded by the Rev. Dr. Anderson, it was resolved. "In view of the interesting historical facts stated in the so called Nestorian monument of Singan-fu, and the uncertainty, at the same time, which there seems to be, as to its genuineness, and in view of its not having been seen by any European, so far as appears, since the middle of the seventeenth century, —that the American missionaries in China be requested to take some measures, as they may have opportunity, in order that the monument be revisited, its present condition described, and a new facsimile of the whole inscription taken, by some competent person and made accessible to the learned."

republished it again and again, although they speak of the extravagant boasting of its contents, although they charge the authors with hypocrisy and deceit, and take occasion from it to launch forth invectives not only against the sect it commemorates, but also against the Christian religion in every form, and more generally against all foreign religions whatever. yet we never find the least trace of suspicion, as to the existence of the stone, or the veracity of the date it bears.

For the present we pass over the testimony to be derived from various publications in the Chinese language, which have been issued both by foreign missionaries and by their native converts; although considering that they have thrown the weight of th ir character into the scale, that they were men not likely to be deceived in the matter, and that in the promulgation of their own faith, they have endeavoured to give force to their arguments, by illustrations drawn from this monument, in their appeals to a people who had the best possible means of judging of its authenticity, and who under the supposition of forgery, most assuredly would not have failed to bring home to them with merited retribution the consequences of the imposture they were thus using their influence to establish:—in the face of these facts. we think their evidence cannot be lightly set aside, under the assumption that they were interested parties.

We will however cite another class of witnesses, who must be entirely free from any imputation of this kind.

The 金石文字記 *Kin shih wān tsze he* "Record of the Characters of Metal and Stone Inscriptions," published by Koo Yen-woo a native of Kwan-shan, at the commencement of the present dynasty, and republished in Shanghai in 1824, on the 25th page of the 4th vol., notices the "Tablet commemorating the propagation of the Illustrious religion in China; composed by the priest Kingtsing; written in the square character, by Lew Sew-yen; set up in the 1st month of the year 781; now in the Kin-shing monastery, outside the city of Singan foo." The 6th volume which contains a long catalogue of uncommon forms of characters on inscriptions, again notices the Syrian tablet as containing 翠 instead of 粲 *tsan* "effulgence," in the sentence, "the bright gems emitted their effulgence." The preceding character was used in former times with this same meaning, though it has long been abandoned in the ordinary literature of the day. Examples of this kind are exceedingly numerous in Chinese, but it is only scholars who have attained a considerable standing, that have sufficient knowledge of the *koo wān* (ancient literature), to enable them to apply such words with due

effect, and this it is which commands the admiration of the literati to a great extent.

The 關中金石記 *Kwan chung kin shih ke* "Record of the Metal and Stone Inscriptions of Shen-si," published by Pieh Yuen of Chin-yang, President of the Board of War, about A.D. 1780, on the 8th page of the 4th volume, has a notice of the "Tablet commemorating the propagation of the Syrian Illustrious Religion in China; erected in the 1st month of the year 781: the inscription composed by the priest King-tsing; written in the square character by Lew Sew-yen, with a heading; in the Tsung-shing monastery, at Singan-foo." After about half a page digression on the geography of "Ta-tsin" (which we have translated Syria) of the tablet, it proceeds to identify the first church of this sect in China, with a church recorded in the "Topography of Changngan," to have been built in the E-ning Way A.D 639, the priest of which is named A lo-sze, which the writer remarks is merely an error of the author of the topography and should be the same as A-lo-pun of the tablet.

In the 金石錄補 *Kin shih luh poo* "Supplementary Record of Metal and Stone Inscriptions," published by Ye Yih-paou Kew-lae a native of Kwan-shan A.D. 1790, are the following remarks on this stone:—"This tablet states that 'the tablet eulogizing the propagation of the Illustrious Religion in China, with the preface as composed by King-tsing, a priest of the Syrian Church; again, the tablet was erected in the 2nd year of Kien-chung (A.D. 781) on the 7th day of the 1st month, being Sunday, written by Lew Sew-yen, Secretary of the Court Council, formerly Military Superintendent for Tae-chow.' At the foot and on the edges are foreign characters. At the foot is inscribed—'Assistant Examiner: the High Statesman of the Sacred rites, the Imperially-conferred purple gown Chief Presbyter and Priest Ye-cha.'[1] [This stone tablet was examined and set up by the Priest Hing-tung.[2]] These

1 This book and several other of the authorities quoted here give this name 業剎 Ye-cha, but Kircher gives 業利 Ye-le, and in a very carefully executed impression from the stone, which we have recently procured in Shanghai, a manuscript note at the end, written many years ago, gives it Ye-le, which we presume to be the more correct.

2. The line here enclosed in brackets is not given at all in Kircher's copy, but as it exactly coincides with the manuscript note referred to above, there is every reason to believe it correct. It will appear out of order here for the Assistant Examiner to be placed before the Chief Examiner, but this may be explained by the fact of the Chinese immediately following the Syriac, and is intended doubtless to be read in the same order *i.e.* from left to right, but the Chinese copyists not being aware of this fact, would take the right hand line for the commencement, in the usual way. This is not a groundless conjecture, for it is well known, that in the Manchu and Mongolian books printed in China, where there is occasion to introduce Chinese quotations, these are printed contrary to the usual Chinese form, the lines succeeding each other from left to right, in accommodation to the Tartar mode.

words are interspersed with the foreign characters; which characters are all turned towards the left, and are untranslateable. I take the — Triune and mysterious in substance, the eternal true Lord *Aloho*' of the tablet, to be the lord of that religion. 'The most virtuous Alopun from the country of Syria, arrived at Chang-ngan in the year A.D. 635; and a Syrian church was built in the capital, in the E-ning Way, to be governed by twenty-one priests, in A.D. 638.' This shows that the Roman Catholic religion was introduced into China, from the commencement of the T'ang dynasty, and up to the present time, it has become disseminated through the whole empire. I read in the 'Account of the Western Regions,' that Fuh-lin, the ancient Ta-tsin borders on the Western sea, is distant from the capital of China forty thousand *le*. It carries on a commerce with Siam, Cochin-china, and the Five Indies. In the flourishing period of Kae-yuen (713—742) there was a rush of Western foreigners who came from a distance of ten thousand *le*, eagerly presenting the sacred books of their various nations, which were received into the Palace for the Translation of Classics, and thereupon the religions of foreign regions became practised in China. When the number of their priests could be estimated, by the number of temples erected At that time there were 5,358 temples, 75,024 priests, and 50,576 nuns; there was a censor appointed to take account of the priests and nuns belonging to the two capitals; if any of the priests or nuns remained out of their temples at night, it was noted in a register; they were not allowed to lodge among the people for more than three nights; if any did not return to their locality for nine years, their names were recorded in a book, and they were treated with great severity. Now the erection of a temple in the empire is a rare occurrence, but priests and nuns have become innumerable.

In the 四庫全書提要 *Sze koo tsuen shoo ti yaou* "Important selections from the books in the imperial library," a compilation drawn up by order of the emperor Kien-lung and published about the year 1760, a work which occupied several years in the completion, a number of the chief ministers having been engaged on it, we read as follows,—" 'Summary of Western Learning in one volume with an Appendix in one chapter, on the T'ang tablet of the Syrian Church.' This tablet states that in the year A.D. 639, Alopun of the kingdom of Syria, brought his sacred books and images from that distant part, and presented them at the chief capital, when orders were given by the emperor, to build a Syrian church in the E-ning Way, to be governed by twenty one priests, etc." The

editors then go on to quote a number of historical incidents, which show a great amount of research into the national antiquities, with a view to identity the religion spoken of in the tablet, and which in some instances are anything but flattering to the adherents of that religion. These we shall notice in a subsequent part. At the conclusion of their remarks on the subject, they say—"Since Julius Aloni in writing this book has adduced the T'ang tablet as a testimony in his favour, this still further removes any doubt as to its being the Heen[1] religion. But no one has yet traced out by proofs from antiquity, the origin of its propagation, and hence it has spread all over the breadth of the land. From the time of Wan-leih (1573-1620) scholars and great statesman have in general limited their discourses to the doctrine of the heart, and merely issued works of a metaphysical character, subjects which only embrace the life of the individual; therefore they have not investigated antiquity to discover the evidence of facts, by which they might put a stop to the propagation of these depraved discourses."

The 金石萃編 *Kin shih tsuy peen* "Collection of Metal and Stone Inscriptions" was published by Dr. Wang Gae, a great statesman of the banqueting house, and Vice-president of the Board of Punishments in 1895, when he had reached the advanced age of 82. This work contains about a thousand inscriptions taken from existing monuments of various ages, from the Hea dynasty (B.C. 2200) down to the end of the Sung (A.D. 1264). The 102nd volume commences with the Syrian monument, the discussion of which occupies more than thirteen leaves. After giving the size of the stone, the number of the lines and characters on it, a transcript of the Chinese part on the face is given entire. From the critical remarks which succeed, we select the following, which is an extract from the 來齋金石刻考畧 *Lae Tsae Kin shih keh kaou leo* "Brief examination of stone and metal engravings by Lae Tsae."—"To the west of the city of Singan, where now stands the Kin-shing monastery, in the time of Tsung-ching (1628-1644)[2] of the Ming dynasty, Tsow Tsing-ching of Tsin-hing, Prefect of Singan, had a little boy named Hoa-seng, who was endowed with extraordinary acuteness at his birth; from the first he was able to walk, and soon began to join his hands in supplication to Buddha, which he continued to do almost without relaxation day and night; in a short

1. This is the name of an ancient religion in China, which the writers endeavour to identify with the religion of the tablet, and also with the Roman Catholic religion.

2. There is an error here as to the date of at least three years too late.

time, he was taken sick; with his eyes scarcely open, he peered out sideways laughing, and then went to his long home The spot chosen by divination for his burial, was to the south of the Tsung-jin monastery in Chang-ngan. When they had dug to the depth of several feet, the excavators came upon a stone, which happened to be the tablet of the propagation of the Illustrious Religion.[3] This tablet having been imbedded in the earth for a thousand years, and now for the first time re-discovered, shows the natural succession of cause and effect throughout the three generations (*i.e.* past, present and future). This child having been one of the pure unshaven ones returned again; thus the 'pleasant habitation awaiting Chin Pin,' and 'Yang Ming remaining till the opening of the door,' have been shown to be no idle sayings. See the 劉雨化集 *Lew Yew-hoa Tsieh* 'Miscellany of Lew Yew-hoa' of Pin yang. The characters are in the first style of art, without the least defect. The foot and the ends have foreign characters on them, similar to those in the Buddhist classics." Here we see the author of this extract either intentionally or otherwise, ignores all allusion to the Christian religion on the tablet, bringing it forward as a link in the evidence in favour of the metempsychosis, supposing this child in a former state to have been one of the pure and disinterested priests commemorated on the tablet. But whatever may have been his theory on this point, his evidence is equally applicable to our purpose, in showing the existence and authenticity of the stone in question.

Further on is an extract from 潛研堂金石文跋尾 *Tseen yen tang kin shih wān po wei* "The Tseen-yen Hall Appendices to the Metal and Stone Literature" by Tseen Ta-hin Attendant on the Imperial household in the time of Kea-king, a native of Kea-ting. Speaking of this tablet, he says—"The Illustrious Religion is the religion established by the people of Syria in the Western regions." Again—"There is only this tablet that bears record of the Illustrious Religion, and hands down any particulars respecting it; according to which, it commenced from the beginning of the T'ang dynasty, when Alopun the Syrian priest, bearing the

3. This incident is alluded to in a manifesto by Michel Boim, published in Kircher's "Chine Illustrée," although he gives a somewhat different version of the story; he says—"The Governor of this place having been informed of the discovery of a marble so rare, and a monument so precious, pressed by a movement of curiosity, and perhaps also because he had lost a child the same day, proceeded to the spot caused a book to be written to the praise of this illustrous stone and caused this treasure to be removed, (after he had taken a faithful copy upon a similar marble) into the temple of the Tauist priests, which is distant about a mile from the walls of si-ngan-foo the metropolis of the kingdom; in order to give to posterity an eternal memento, and to prevent future ages from being deprived of so great a boon."

sacred books and images, arrived at Chang-ngan. Tae-tsung ordered the authorities to build a Syrian church in the E-ning Way, to be governed by twenty-one priests. In the time of Kaou-tsung, Alopun was honoured with the appointment of Great Conservator of doctrine for the preservation of the state, and orders were given as before for the erection of Illustrious churches in every province. The priests all shaved the crown of their heads, and preserved their beards. Seven times a day, they had worship and praise; once in seven days, they offered sacrifice. The image they honoured was the Triune, mysterious in substance, eternal, true lord Aloho (God). Now if we trace back to the year of the birth of Jesus the Lord of heaven, who is worshipped by Europeans, it ought to be in the period Kae-hwang (518-631 of the Suy dynasty. Some say this is the ancient religion of Syria; whether such be the case or not, I have not examined. At the end it says,—'Erected on the 7th day of the 1st month, being *Ta-yaou-san-wan* day;' *Ta-yaou-san-wan* which it speaks of, is an expression belonging to that religion. "The fireproof cloth is a cloth that can be cleansed by fire." It is strange that an author like this, who has shown himself so acute by his other works, and especially in matters of chronology, should have fallen into the monstrous error with regard to time, which he has exhibited in speaking of the period of the birth of Christ; and can only be accounted for by the haughty indifference with which natives of talent too frequently treat foreign religions, wilfully keeping themselves ignorant of facts, which very little trouble might put them in possession of. Notwithstanding this egregious misconception, we imagine few will be inclined to reject his testimony as to the existence of the stone in question, which is all we have to do with at present.

At a later period, this author published another small work, called 景教考 *King keaou kaou* "Inquiry into the Illustrious religion," from which we extract—"In the time of Wan-lieh (1573-1620)[1] when some people at Chang-ngan were excavating the ground, they found a tablet of the Illustrious Religion, dated 2nd year of Kien-chung (A.D. 781) of the T'ang dynasty. The scholars and great statesmen who had become disciples of the Western teaching congratulated each other on the fact of their religion having been propagated in China, so early as the time of the T'ang; but if they were asked what the Illustrious Religion really was, they could not tell."

1. There is an error here of at least four years too early.

After this comes an extract from the 道古堂文集 *Taou koo t'ang wán tseih.* "Literary miscellany of Taou-koo Hall." by Hang She tseuen, entitled "Supplementary Inquiry into the Illustrious religion." Without making particular mention of the discovery of the stone, he proceeds as if that were an admitted fact, to remark upon the religion of which it records the existence, and endeavours to draw a parallel between that and Mohammedanism, and in some respects Buddhism and some other religions also.

In conclusion, the author of the *Kin shih tsuy peen* gives his criticisms on the opinions of the various authors quoted; from which we extract a few sentences:—"We have now examined the investigations which have been made regarding the source and spread of the Illustrious religion of this tablet. In the 'Tseen-yen Appendices' it is said 'Now Jesus the Lord of heaven is worshipped by Europeans. Some say this is the ancient religion of (Ta-tsin) Syria.' On the tablet, there is the expression,—'He appointed the cross as the means for determining the four cardinal points.' Now Roman Catholics always raising the hand and making the sign of the cross, exactly agrees with the words of the tablet." Again—"The tablet speaks of 'the Most Virtuous Alopun from the country of Syria.' The Records of the Western regions given in the two Histories of the T'ang dynasty, in their accounts of the various kingdoms, state that (Fun-lin) Judea is also named (Ta-tsin) Syria, but they do not give a single word respecting the introduction of the Illustrious religion into China." Again—"This tablet speaks of 'The unchangeably (眞 *chin*) *true* and invisible:' 'Veiling his *true* dignity;' 'in clear day, he ascended to his *true* station;' 'The *true* and unchangeable doctrine;' 'Observing the azure clouds, he bore the *true* sacred books,' Here is the word (*chin*) *true* used in profusion. Now when Mohammedan halls are built, they are called Houses of worship: but why are they also called Temples of the *true* religion? Now the Mohammedan religion is unquestionably an offshoot from the Illustrious religion; but while in some things they are similar, in others they differ. In consequence of the difficulty of understanding these religions, I have not been able to separate these things; and so have presented the various discussions on the subject, to afford the means of more extensive inquiry. As to the meaning of the word (景 *king*) 'Illustrious,' in the Illustrious religion of the tablet, there are two passages in the inscription, viz—'A (*king*) bright (宿 *suh*) constellation announced the felicitous event;' and 'He suspended the (*king*) bright (日 *jih*) sun to invade the chambers of darkness.' There is a mutual agreement in meaning here with (*king kang*)

the bright star, and (*king kwang lin chaou*) the bright glory reflecting its lustre; but 丙 *ping* being a name of the imperial family during the Tang dynasty, there is also a possibility that the word *king* may have been substituted for it.[1]

In the 天一閣書目 *Tien yik ko shoo muh* "Catalogue *raisonnée* of the Library of the Fan family at Ningpo," published by Yuen Yuen the Governor of Che-kiang in 1809, there is a supplementary volume containing a list of the impressions of tablets in the establishment. On the 10th page, we find there is a copy of the "Tablet commemorating the propagation of the Illustrious religion in China; composed by the priest King-tsing; written in the square character by Lew Sew-yen; set up in the 1st month of the year 781." On the 40th page, among the additions, there is again noted a copy of the "Tablet eulogizing the propagation of the Illustrious religion in China; composed by the priest King-tsing, and written by Lew Sew-yen; in the year 782." This last is doubtless a typographical error for 781.

The 海國圖志 *Hae kwo too che* "Geography of the world," the joint production of the well-known Commissioner Lin and Wei Yuen an officer at court, one of the most popular works that has been published of late, first appeared in 1844, and soon passed through several editions. The 15th volume which professes to be a descriptive account of Judea, is devoted almost exclusively to the discussion of the Christian religion, in which the author takes frequent occasion to exhibit the spirit of bitter animosity which he cherishes towards that religion. A large portion of the whole is allotted to the examination of the Syrian tablet, which is given almost entire, and most of what is contained in the *Kin shih tsuy peen* is here reproduced, the author thus, as it were, endorsing the expression of confidence in the existence and authenticity of the record; while not the most remote hint of suspicion as to the contrary ever appears. Some additional extracts and remarks are also given on the same subject. We select a few lines of a quotation from the 癸巳稿類 *Kwei-sze kaou luy* "Journal of varieties for the 13th year of Taou Kwang" by Yu See, an inferior government officer. This author's remarks

1 The idea which the author wishes to present here, is the identity of this sect with the Parsees or fire-worshippers; hence supposing the proper word for their name was 炳 *ping* "Illumination from fire;" but as this character formed the name of one of the emperors of the T'ang, according to Chinese custom, no one else was permitted to use it, and hence they substituted *king*, a word of similar import. This is one of those vain speculations in which Chinese authors frequently indulge their imaginations, though there does not appear to be any evidence to support the supposition.

are of little critical value, and he shows great inaptitude in dealing with the subject in hand, although he appears tolerably correct in the detail of isolated facts. His chief aim is to show, that the Christian religion is the natural offspring of Buddhism. He says—"Jesus was born in the 2nd year of the term Yuen-show of the emperor Gae Ti of the Han dynasty. A bright star announced the glad tidings in the land of Judea. In the 2nd year of Keen-chung (781) of the T'ang dynasty, King-tsing the priest of the Syrian church set up the tablet commemorating the promulgation of the Illustrious religion in China, whence we hear of the first erection of Syrian churches, in the 7th month of the 12 year of Chinkwan (639). The tablet speaks of the 'Triune and mysterious in substance, the eternal true Lord God." Again it denominates his mother the 'Triune, divided in nature, Illustrious and Honourable Messiah;'[1] and says that 'a virgin gave birth to the Holy one in Syria.' Again it speaks of 'Aloho (God),'—'Preserving their beards, and shaving their crowns,'—'Seven times a day having worship and praise,'—and 'Sacrificing once in seven days.' These things, like the Manichean observances, after the Tang dynasty, are never mentioned in the histories of the Sung and Yuen."

In a recent work 國朝詩人徵略 *Kwo chaou she jin ching leo* "Illustrations of the Poets of the present dynasty," by Chang Wei-ping of Pwan-yu, the 47th volume of the section, which gives a brief abstract of the geography of foreign nations, has the following remarks on he 24th page, respecting the Cross mentioned on the T'ang tablet. "He appointed the Cross as the means for determining the four cardinal points; he moved the original spirit and produced the two principles of nature (See the T'ang tablet of the Propagation of the Illustrious religion.) The tablet of the Illustrious religion, speaking of the Cross, says,—'He appointed the Cross as the means for determining the four cardinal points.' (Journal of Varieties for the 13th year of Taoukwang). As Aloni and Verbiest, two Europeans, both adopt the tablet of the Illustrious religion as an evidence in their favour, when Yu See refers the origin of the Cross to the tablet of the Illustrious religion, where it says—'He appointed the Cross as the means for determining the four cardinal points,' this is not altogether inapplicable; but what is meant by appointing the Cross is not well defined. Now when we examine the Arabian Geographical Classic, we become perfectly clear on the meaning of the Cross. I have appended some quotations from this in the sequel. (Leisure sayings of the old fisherman.)"

1. The blunder in the interpretation of the inscription is unpardonable in a native author, unless we make very great allowance for the doctrinal difficulties connected with the subject.

The 瀛環志畧 *Ying hwan che leo.* "Compendious description of the world," the most recent native work on geography, has repeatedly called forth the commendations of foreigners, for the liberal and impartial manner in which the author treats his subject, and was reviewed at some length in some of the early numbers of the *North-China Herald*. In the 3rd volume, when describing Persia, the author takes occasion to introduce the subject of the Nestorian tablet. After discoursing on various ancient religions, supposed to have originated in Persia, he proceeds.—"There is also the tablet recording the propagation of the Illustrious religion in China, as related by King-tsing, a priest of the Syrian church, A.D. 781." Again —"The tablet of the Illustrious religion is still more lying and extravagant; the Illustrious religion is the sect of Fire worshippers. Where it says—'A *bright* star announced the felicitous event;' 'He suspended the *bright* sun, to invade the chambers of darkness;' 'In *clear* day he ascended to his true station, &c.;' the allusions are all to the solar *fire*. Again where it says—'He appointed the cross as the means for determining the four cardinal points:' 'Once in seven days, they sacrifice, &c.;' it drags in the Roman Catholic religion. Where it speaks of—'The triune and mysterious in substance, the eternal true lord Aloho (God),' we do not know who is meant, these being all conventional terms. *But this is merely a dressing up of the dregs of Buddhism; it is not the Fire sect; it is not the (Tien) Heaven sect; it is not the Buddhist sect; in fine there is no name by which to classify this religion.* For the Persians in worshipping the spirit of fire, adhere to their ancient usage; *while Buddhism was practised in India, it was their neighbour on the east; and the religion of the spirit of Heaven prevailing in Syria, was their neighbour on the west; so that in the time of the Tang dynasty, the Roman Catholic religion being then flourishing in Syria, it was the craft of the foreign priests, to drag the three religions into combination, and invent the name of the Illustrious religion in order to exalt themselves; so that the Chinese not understanding their origin and ramifications, might be blindly led to adopt their faith; thus verifying the saying of Chang-li, that they are only desirous of hearing something strange.* Again the tablet says—'In A D. 639, the Greatly virtuous Alopun of the kingdom of Syria, came from afar, bringing the sacred books and images, which he presented at the chief capital.' If Alopun really came from Syria, then his religion was the Roman Catholic without doubt; *his sacred book should be the Bible and Gospels, which have been handed down in Europe, and his images those of Jesus on the cross: but we have not heard of these being in existence*

at that time; and when the Illustrious religion is said to stand side by side with the fire spirit of the Persians, and to be merely a decoration of the schools of Buddhism, this is inexplicable.

Thus far, we have been particular in giving our authorities, that others wishing to do so, may be able to verify the statements; for they are all taken from books, within the reach of almost every person in China. Those who have access to more extensive stores of native literature, would no doubt be able to add a great accumulation of evidence. The above extracts will be sufficient however to show that there is but one voice among the Chinese as to the authenticity of this remarkable monument, for there is nothing on the other side of the question knowingly withheld. Besides this, if we consider carefully the subject of the inscription, it may still further aid us in forming a correct judgement.

According to history, the Nestorian schism took place in the beginning of the 5th century, the members of which body soon distinguished themselves by their zealous endeavours to propagate the faith through various countries. Their chief seminary at Edessa in Mesopotamia became famed as the centre of an extensive system of Missionary influence. About the close of the same century, this was transferred to Nisibis, where it enjoyed the patronage of the Persian monarchs, and was instrumental in sending many divines through the countries of Eastern Asia with the special object of converting the people to the knowledge and faith of Christianity.

Although we meet with indisputable traces of their persevering efforts in the countries of the east during the succeeding centuries, yet the circumstantial details left on record are meagre in the extreme. We have reason to believe, however, that a succession of these zealous men continued to travel eastward with this single purpose in view; and especially about the time indicated on the tablet, when Mohammedanism was making rapid strides throughout Western Asia, having just subdued the kingdom of Persia, might we naturally look for parties of these religionists, seeking refuge in distant lands, forced from their homes by the persecuting zeal of the Mussalmans. According to the testimony of Chinese scholars, the traces of the existence of these foreign sectaries have been wilfully excluded from the national histories, and unless it be on the more durable mementoes of the stone tablets, we can only get a clue to them in an indirect way. When however these indirect testimonies harmonize with and corroborate the tablets, there is little danger of being misled; and it may be noticed, that where a discrepancy exists, it is customary with the native to correct their histories by the tablets

In the "Appendices to the Tseen-yen Hall tablets" there is an extract from the 重嚴寺碑 *Chung-yen sze pae* "Tablet of the Chung-yen Monastery" composed by Shoo Yuen-yu in the 9th century, as follows—"Among the miscellaneous foreigners who arrived, there were the Manicheans, the (大秦 *Ta tsin*) Syrians, and the worshippers of the spirit of Heaven.[1] The temples of these three classes of foreigners throughout the empire, are not equal in number to those of our Buddhists in one small district." A search through several works on ancient monuments and inscriptions has failed to discover this tablet, but there is no doubt of its existence, as it is quoted over and over again by other writers; the author of the inscription is a prominent character in history, having been censor during the reign of Wan-tsung.

That the religions of the west, inclusive of the one now in question, had gained a prominent standing in the empire towards the middle of the 8th century, we know from the imperial edict of Heuen-sung, from which an extract is given in the 冊府元龜 *Tseh foo yuen kwei* "Great tortoise of the National archives," a book in 1,000 volumes published by imperial command, in the year 1012. It states[2] that "In the year A.D. 746, in the 9th month, an edict was issued, saying—"The religion of the Persian classics having come from Syria, has now been long handed down and practised in China. When its votaries first erected their temples, they gave them their own national name. Henceforth to enable others to trace their origin, let all the Persian temples belonging to the two capitals, have their names changed to that of Syrian temples; and let this be complied with through all the provinces of the empire." The same extract is found in the 西溪叢語 *Si hi tsung yu* "West brook collected sayings" published by Yaou Kwae during the Sung dynasty which also notices several other immigrations of foreign religions (not Buddhist) about the same period; one as early as A.D. 632.

Tseen, in his "Inquiry into the Illustrious religion," quotes the following passage from the 長安志 *Chang-ngan che* "Topography of Chang-ngan,"[3] published by Min Kew in the Sung dynasty.—"On the north-east of the E-ning portal street, is a Persian Foreign temple, which the emperor Tae-tsung caused to be erected for the

1. The tablet has 秋神 *Tseiw shin* "The spirit of autumn," but the author who makes the extract says, that the character *Tseiw* is cut in a mistake for 昊 *keu* "heaven," in which he is doubtless correct.

2. Vov. 51, page 20.

3. Chang-ngan is the ancient name of Singan.

Syrian foreign priest (阿羅斯)[1] Alosze in the year A.D. 639." Again—"To the east of the Le-tseen portal, there is an ancient Persian temple; this is the Persian temple that Pei-loo-sze the Persian monarch requested to be erected in the year A.D. 677."

In a fragment of a work by Wei Shuh of the Tang dynasty, the 兩京新記 *Leang king sin ke* "New Record of the Two Capitals," there is also a notice of this last-mentioned temple. Only the 3rd out of 5 volumes of this work is extant, and that incomplete; but what remains, being a description of Chang-ngan, notices the existence of several of these foreign temples, and has been republished in the 佚存叢書 *Yih tsun tsung shoo* "Repository of Relics." It says,—"On the south-east of Cross street, is a Persian temple. This Persian temple was erected in the year 677, at the request of the Persian monarch Peih-loo-sze." Again,—"On the north-east of Cross street, is a Persian foreign temple; south from this is called the Keu-tih way. Whether these last may have been Parsee or Christian edifices, is not easy to determine now, as it was customary at that time, to apply the name of Persian to the temples of all the different sects which came to China from that quarter.

The frequency and precision with which names of places and persons together with dates are employed in any document, has been considered a fair test of its genuineness; as experience has shewn that cases of imposture are marked by extreme vagueness in this respect. This we might naturally expect when we consider the intricate labyrinth which the mention of even a few historical incidents involves. Where however the records of such facts mutually supports and throws light on each other; and where not only the open assertions, but the more latent inferences, preserve a general consistency together, and harmonize with known history, this must form a strong chain of presumptive evidence in favour of the document in question. Applying this test to the Nestorian monument, we find almost every line marked by some period of history, some geographical allusion, or the notice of some custom; and in drawing attention to a few of these, it will be observed, that while there is no single quotation, which taken as an isolated statement, might not perhaps be introduced by a modern hand, yet the harmonious sequence in a long train of facts, is such as a forger would scarcely manage without tripping in some matter.

1. The tablet gives 阿羅本 A-lo-pun. Perhaps Alosze may be a different form of the same name; or the author of the Topography may have fallen into an error in quoting from memory, which is a common occurrence; or which is most likely, it is a typographical error.

The tablet speaking of the priest Alopun, says,—"In the year A.D. 635, he arrived at Chang-ngan; the Emperor sent his prime minister Duke Fang Heuen-ling, who taking his subordinates to the west border, conducted his guest into the interior." On referring to the *(Tang-shoo)* "History of the T'ang dynasty,"[1] we find *Fang Heuen-ling* spoken of as one of the earliest and most attached servants of Tae-tsung the founder. Born in 580, being the son of a government officer under the declining Suy dynasty, at an early age he foretold the downfall of the reigning house, and resolved to cast in his lot with the new aspirant. His attachment to his prince, and his qualifications as a statesman soon procured his promotion; in 627 when Taé-tsung assumed the imperial dignity, Heuen-ling was made Duke of Hing, and in 631 he was promoted to the *Dukedom* of Wei. In 635, the year he is spoken of on the tablet, being that also of the demise of Kaou-tsoo the father of the emperor, we find him receiving the confidential commission of an appointment to superintend the operations at the royal sepulchre, and at the same time, an acknowledgment of his merit in the additional title of Triumvirate Associate of the Rising state, and also emolument equal to the revenue arising from 1,300 people. During an incursion of the Too-kuh-hwan Tartars the same year, Fang Heuen-ling is spoken of as holding audiences of great importance, on behalf of the emperor.

The tablet states,—"In the year A.D. 699 the Buddhists gaining power, raised their voices in the eastern metropolis;" This apparently alludes to some act of intolerance practised by the Buddhists towards the Christians; but history makes no mention of this; an attentive consideration of the state of affairs, however, at that period, will show that such is by no means an improbable event. It should be borne in mind that this was during an interregnum in the T'ang dynasty. On the death of the emperor Kaou-tsung in 684, his empress named Woo seized the reins of government, and assumed the supreme power with the appellation of Tsih-teen. Fixing upon Lo-yang the eastern capital as the seat of goverment, she banished the rightful heir to the throne, and changed the name of the dynasty from T'ang to Chow. This princess in her early days, having submitted to the Buddhist tonsure, was admitted as an inmate of a nunnery, whence she was taken by Kaou-tsung to be his consort, and eventually empress. While residing in this religious establishment, her mental character and taste probably received much of that bias which particularly marked her after progress. Once alone and free to sway the imperial sceptre, her partiality for the Buddhists

1. Biographical section, vol. 16.

soon developed itself in the liberal patronage she bestowed upon that class. Much of the state revenue was expended in building religious houses, and casting brazen images; and it was only at the importunate solicitation of an influential minister Tih Jin-kee, that she was dissuaded from going in state to visit a pagoda containing relics of Buddha, at the request of a foreign priest. When about to proceed, Tih Jin-kee cast himself on the ground before her, imploring her as she cared for the national welfare to desist; the desired effect was thus obtained.[1] This took place in 699, the year referred to on the tablet, and may show the great influence the Buddhists had then obtained at court. Shortly after this, we find a spirited memorial presented by Jin-kee, in which he enters in detail on the various measures adopted by her majesty in reference to the Buddhists, and sets forth with a degree of freedom, the national calamities which such a course was likely to produce.[2] In 705 the government of this princess was overthrown, and the T'ang succession resumed in the person Chung-tsung.

The tablet again says,—"In the year A.D. 713, some low fellows excited ridicule, and spread slanders in the western capital." Respecting the persecution here hinted at, history is entirely silent, as it is about almost everything connected with this sect. All we can assume is that there is nothing improbable in the statement.

On the tablet we read,—"The high principled emperor Heuen-tsung caused the Prince of Ning and others, five Princes in all, personally to visit the felicitous edifice." From the T'ang history again, we learn that the Prince of Ning was the elder brother of Heuen-tsung, and had given way to the latter in the imperial succession. He was promoted to the *princedom of Ning* in the year 716. Besides these two, the emperor Juy-tsung had four other sons, the Prince of Shin, the Prince of Ke, the Prince of See, and Prince of Suy. When Heuen-tsung arrived at Chang-ngan from Lo-yang in 701, he appointed a residence for his five brothers in the Hing-king Way, and named it the Residence of the *Five Princes*. These six brothers appear to have lived together on the most amicable terms, the intercourse of the emperor with the other five being frequent and harmonious.[3]

Again the tablet states,—"In 743, orders were given to the great general Kaou Leih-sze, to send the five sacred portraits (of the T'ang emperors) and have them placed in the church, and a gift of a hundred pieces of silk accompanied these pictures of intelligence."

1 *T'ung kien kang muh*, vol. 42.
2 *T'ang shu*, Biographical section, vol 39.
3 *T'ang shu*, Biographical section, vol. 45.

In the section of the T'ang history devoted to the Biography of Eunuchs, Kaou Lih-sze occupies the second place on the list. From this memoir, we learn that he was a native of Pwan-chow, originally surnamed Fung, that he was born near the end of the 7th century, and having become a eunuch, was admitted into the palace in his youth; some time after, he was adopted as the son of an officer in the palace named Kaou Yee-suh, whence he assumed the surname Kaou. The great favour he enjoyed with Heuen-tsung may be inferred from a remark which that emperor was in the habit of making,—"When Lih-sze is in attendance, I can sleep in security;" hence, the biographer adds, he was constantly in the palace, only going out on rare occasions. In 741, he was made Army controlling Great general, and also Guardian of the right palace door *Great General*, being at the same time promoted to the dukedom of Po-hai[1] In the biography of the Prince of Ning, it is said that on the death of that prince in 741, the Great General Kaou Lih-sze was deputed to place on his shrine an inscription written by the emperor.[2] Heuen-tsung being the sixth of the T'ang dynasty, the five sacred portraits alluded to must be those of the preceding five emperors, Kaou-tsoo, Tai-tsung, Kaou-tsung, Chung-tsung, and Juy-tsung.

The tablet says,—"When the Duke Koh Tsze-i, secondary minister of state and prince of Fun-yang at first conducted the military in the northern region, &c." In the T'ang history there is a long biography of Koh Tsze-i from which it may be seen that he was one of the principal historical personages of the period. According to this he was born in Hwa-chow in 696, and was made Military commissioner for *So fang* "the Northern region" in 755, on occasion of a revolt by Ngan-Luh-shan, a general under the imperial government, in the suppression of which he took a very active part; and as a reward for his service, was created Duke of Tai-kwoh in 757. In the beginning of 772, he was made *Fun-yang keun wang* "*Prince of Fun-yang*," and was still alive at the date of the inscription, having died in the 6th month of the same year, at the venerable age of 85.[3]

Among the geographical allusions on the tablet, the name of most frequent occurrence is 大秦 *Ta-tsin*, which we have translated Syria as there is little room for doubt, that this is the term most applicable to the eight several occasions on which the name is introduced. That the author of the inscription himself had not a very clear notion of the country indicated, one may be inclined to

1 *T'ang shu*, Biographical section vol. 134.
2 Do. do vol. 45.
3 Do. do vol. 70.

surmise, from the quotation which he introduces from the Chinese historical books, written several centuries prior to the period in question. A reference to the histories of the Han and Wei dynasties as indicated, proves particularly unsatisfactory in determining the precise country intended. The information furnished by these authorities has the appearance of a miscellaneous collection of statements from various sources; it being left to the sagacity of the reader to discriminate between that which is trustworthy, and some which is evidently bordering on the fabulous. A statement in the History of the After Han, points unequivocally to the Roman empire as *Ta-tsin*, in which it is said that the emperor Ngantun (Anthony) sent an ambassador to China, A D. 166. Other parts of the account however are exceedingly difficult to reconcile, and it is scarcely probable that the Nestorian missionaries would select Rome as a national designation for their church. The account however may be somewhat harmonized by supposing that as Syria once formed a part of the Roman empire, the name and glory of that great empire may have attached to it in oriental history, down to later times. The after Han History corroborates in the main, the description of *Ta-tsin* given on the tablet; we find it there stated that the country is famed for its *coral, curious gems, fire-proof cloth, life-restoring incense, bright-moon pearls, night-lustre gems.* It is also stated that *the country is entirely free from alarms, robbery, theft,* and *brigandage.* The care of the sovereign in the administration of justice is noticed, and the practice of selecting the princes on account of their virtues, as also the great extent of the land But while the tablet states that "on the west it extends towards the borders of the immortals and the flowery forests; on the east it lies open to the violent winds and weak waters," the Han History on the contrary says,—"To the west of this kingdom are the weak waters and moving sands,[1] near to the residence of the *Si wang mu* (Mother of the western king), almost at the place where the sun sets."[2] The account of *Ta-tsin* in the Wei History is substantially the same as in that of the Han, but much condensed. The author of the inscription however mentions another book, on which he seems to have relied, 西域圖記 *Si yih too ki*, "Illustrated Memoir of the Western Regions." Although there is little probability of obtaining this work now, yet

1 This is an evident adaptation of one of the most ancient of Chinese traditions, which records that the residence of the *Si wang mu* is unapproachable in consequence of its being surrounded by waters so weak as to be incapable of floating the lightest object, and sands which are continually shifting The "weak waters and moving sands" are mentioned in the Yu kung chapter of the Shu-king.

2 *How Han shu*, vol. 118.

we find in the Catalogue of books, given in the cyclopædia 玉海 *Yuh hai*,[1] a work of that name is said to have been presented to the emperor in the year 681, by Wang Ming-yuen who was sent as commissioner to Turkestan; which it may reasonably be supposed is the book referred to. On the heading to the tablet,[2] this is called "the Illustrious religion of *Ta-tsin*;" in the title to the inscription, King-tsing is said to be a "priest of the *Ta-tsin* church;" and in the emperor Mai-tsung's proclamation, he says,—"let the proper authority build a *Ta-tsin* church in the capital in the E ning Way." Now although it might be inferred, that in the first two of these instances, the name *Ta-tsin* must necessarily be used, in compliance with the edict issued by Heuen-tsung, thirty-five years previously, "that all the temples of Persian origin should henceforth pass under that designation," yet it cannot well be supposed that the same argument would apply to the imperial proclamation, issued a hundred and seven years prior to the said edict; hence we are naturally directed to Syria, as the cradle of this religion. It is said "the Most Virtuous Alopun arrived from the country of *Ta-tsin*," and Tai-tsung in his proclamation, calls him "The Greatly Virtuous Alopun of the kingdom of *Ta tsin*." Again the tablet says,—"In 744 the priest Kih ho in the Kingdom of *Ta-tsin*, looking towards the star (of China) was attracted by its transforming influence, &c." In reference to these it may be remarked, that although Nisibis was then the chief seat of the Nestorian church, yet Syria was still within their ecclesiastical jurisdiction, there being a metropolitan at Damascus and also at Jerusalem. It is possible, however, from the loose way in which *Ta-tsin* is spoken of, that its limits may have been extended even far to the east of Syria. The only other instance in which *Ta-tsin* is mentioned, marks the spot intended, with much greater precision even than all the others; where it is said,—"a virgin gave birth to the Holy-one in *Ta-tsin*;" the birth of our Saviour leaves little room for question as to Syria being the locality alluded to. There is still indeed another reference on the tablet to the same locality, though from the figurative language employed, it is much less definite than any of the above-mentioned instances. It is said,—"At that time there was the chief priest Lo han, the Greatly Virtuous Ki-leih, and others of noble estate from the 金方 *Kin fang* golden regions." It is well known that the Chinese in their cosmic theories, have allotted each of the four cardinal points respectively to

1 Vol. 16, p. 7.

2 In giving the translation of the inscription in a previous part of this paper, the heading of the tablet was omitted; it consists of nine large characters in three lines, signifying,—"*Tablet of the dissemination in China of the Illustrious religion of Syria.*

one of their original elements, in which category the west is said to belong to gold; hence the force of the above paragraph, where the "golden regions" appears to imply those countries to the west of China.

The next geographical allusion on the stone reads,—"a bright star announced the felicitous event, and 波斯 *Po-sze* 'Persians' observing the splendour came to present tribute." This name was well known to the Chinese of that time, being the designation of an extensive sect then located in the empire and the name of a nation with which they had held commercial and political intercourse for several centuries. The statement here is in admirable harmony with the general tradition of the early church, that the Magi or wise men mentioned in Matthew's gospel were no other than philosophers of the Parsee sect.

Further down we read, "In the year A.D 635, Alopun arrived at 長安 Chang-ngan." This scarcely requires any remark, as it well known that Chang-ngan of the T'ang dynasty, is the modern 西安 Se-gan foo, where the stone was found and is preserved to the present time; and although there is nothing in the inscription to indicate the locality of its erection, yet were it left to conjecture, there is no place could be selected with a greater show of probability than this. Another allusion to the same place, however, occurs on the tablet, which is not so obvious to the foreign reader, who is unable to consult the Chinese original. We have translated it,—"in the year A.D. 713, some low fellows excited ridicule, and spread slanders in the western capital." A translation by M. Léontiewski[1] gives,—"and in the western state of Chao they attempted to decry it" An English translation in the *Chinese Repository*[2] gives,—"and in S'kâu spread abroad slanderous reports." A French version by M. Dalquie[3] gives,—"et la calomnierent dans *Sy kao* (c'est l'ancienne Cour du Roy *Uen uam* dans la Province do *Xen sy*)" A Latin version by Kircher[4] gives,—"calumnatique sunt in *Sy kao* (antiqua est Regis *Uen uam* aula in *Xen sy* Prouincia)." While the last two of these versions are in error in saying that this was the residence of Wan-wang, the two preceding leave the locality undefined. The characters we have translated "western capital" are 西鎬 *Se Haou*, literally "western Haou;" Haou being the name of the site, within 5 or 6 miles of the present Si-ngan, where Woo-wang established his court, after the subjugation of the Shang dynasty, about the end of the 12th century before the Christian era. In B. C. 196, Kaou-tsu of the Han dynasty removed his court to this vicinity, then

1 See "The Cross and the Dragon," p. 28.
2 For May 1845.
3 See *La Chine Illustrée*.
4 See *China Illustrata*.

known as Chang-ngan. Two years later, Hway-ti, the next emperor, surrounded it with a wall, and raised it to the rank of a city. From that period down to the Tang, Chang-ngan continued, with various intervals, to be occupied as the imperial residence.[1] It is known to be the practice of the literati to give the preference to the antique names of places in their elegant compositions; hence this designation of one of the two then existing metropolises. A singular corroboration appears to have come to light recently with respect to this site. The Syriac legend at the foot informs us that this tablet was set up by "the Lord Jazedbuzid, Priest and Vicar-episcopal of 'Cumdan' the royal city." Following this record, are the names of four dignitaries in Syriac, the last of which is,—"Gabriel, Priest, Archdeacon, and Ecclesiarch of 'Cumdan' and Sarag." The Roman Catholic fathers were sorely puzzled to apply this name to any definite locality. While Renaudot in his "Anciennes Relations," endeavours to prove this to be Nanking, Premare denies his position, in an article published in the "Lettres edifiantes;"[2] and it is only since the publication of Reinaud's Travels of the Arabians in China, that we learn that during the middle ages, the place known to the Arabs as Kumdan, was no other than Chang-ngan.[3] If then this place was the Kumdan of Arabian travellers, no argument is required to identify it with Cumdan in the Nestorian inscription. A topical notice of Chang-ngan occurs again in Tai-tsung's proclamation, which says,—"let the proper authority build a Syrian church in the 義寧坊 *E-ning fang* 'E-ning Way.'" The fragmentary work above referred to, "New Record of the two capitals," states[4] that, in the 3rd street west from the imperial city, the third *fang* from the north end is called "*E-ning fang*,"[5] and remarks on the next page,

1 *Chang-ngan che*, vol. 1, p. 1-4.

2 "Letters edifiantes et curieuses," Tome 3, p. 578. New edition. Paris.

3 "On the genuiness of the so-called Nestorian Monument of Singan-fu," by Edward E. Salisbury, p. 412. Not having the original work at hand, we take this statement on the authority of the above learned Professor.

4 Page 14.

5 The *Chang-ngan che* gives an elaborate de ail of the streets and building in this ancient capital, from which we learn that the city was composed of three principal parts; 1st the *Kung ching* or "Palatial city," 4 *le* in extent from east to west, and 2 *le* 270 paces from north to south; 2nd the *Hwang ching* or "Imperial city," on the south of the preceding, 5 *le* 150 paces east to west, by 3 *le* 10 paces north to south, containing 7 streets longitudinally, and 5 transversely; 3rd the *Wae koh ching* or "Suburban city," enclosing the two preceding on three sides, being 18 *le* 115 paces from east to west, and 15 *le* 175 paces from north to south. The whole of this space was parcelled out into *fangs* or solid squares, each square being equally divided by two streets, one longitudinally, and one transversely in the form of a cross and hence termed Cross streets; with the exception of those *fangs* to the south of the imperial city, in which there were no dividing them longitudinally. South of the imperial city, the space was occupied by 4 *fangs* from east to west, and nine from north to south=36. On the east and west sides of the imperial city repectively, were 13 *fangs*, extending the whole length from north to south of the suburban city, while its breadth of each was occupied by 3.

that "on the north east of Cross street is a Persian foreign temple."[1] The *Chang-ngan che* states[2] that the original name of this was *He-kwang fang*, but was changed to *E-ning fang* in 917, the national designation for that year being *E-ning*. Another local allusion runs,—"The emperor commanded the priest Lo-han, the priest Poo-lun, and others, seven in all, together with the Greatly Virtuous Kih-ho, to perform a service of merit in in the 興慶宮 *Hing k'ing kung* 'Hing-king palace.'" In the *Chang ngan che*[3] we find, on the east side of the 3rd street east of the imperial city, the 4th *fang* from the north end, was originally called *Lung-k'ing fang*, but the name was changed to *Hing-k'ing fang* on the accession of the emperor Heuen-tsung in 713. Within this *fang* was the residence of the five brothers of Heuen-tsung. As the inscription reads, we are led to believe that the occurrence there noticed, took place in 741 or shortly after. Now on referring to the *Tsih foo yuen kwei*, under the section on "Imperial residences,"[4] we find it recorded, "that in the year 714, the Prince of Sung[5] and his brothers memorialized the emperor, requesting that he would occupy their former residence in Chang-ngan as a royal palace, which was henceforth by imperial decree designated the *Hing k'ing kung* 'Hing-king palace,' and was decorated with mottoes by the emperor. In 723, this palace was first used in transacting the business of the government." Frequent mention is made of this edifice in the history of that period. In the *Ta Ming yih t'ung che*, it is said to be five *le* south east from the official residence of the Prefect of Si-ngan foo.

One of those antithetical sentences with which the inscription abounds, and which has already been noticed, introduces another name requiring a word of explanation. It is,—"In the year A D. 699 the Buddhists gaining power, raised their voices in the 'eastern metropolis.'" The characters which we have translated "eastern metropolis" are 東周 *Tung Chow*, literally "eastern Chow." It has already been stated that the empire was at this time under the government of the empress Woo Tsih-teen who had removed her residence from Changn-gan to Lo-yang[6] in Ho-nan. By reference to the (洛陽縣志 *Lo-yang hien che*) "Topography of Lo-yang,"[7] we find the earliest notice of this city as a royal seat,

1 A quotation from the *Chang-ngan che* in a preceding part of this paper, in which this temple is said to have been erected for the Syrian foreign priest Alosze, can leave no doubt as to this being the temple alluded to on the tablet.

2 Vol. 10, p. 2.

3 Vol. 9, p. 2.

4 Tol. 14, p. 8.

5 This was the elder brother of the emperor. He was created Prince of Sung in 710, and promoted to be Prince of Ning in 716.

6 Within the present Ho-nan foo, the capital of the province.

7 Vol. 16, p. 1,

during the reign of Ping-wang (B.C. 770—720) of the Chow dynasty, which monarch it is said, being pressed upon by the Western Tartars, fled from the capital Haou, eastward to the city of Lo, which was hence denominated Eastern Chow. The dynasty of Woo Tsih-tien being also named Chow, might afford a still further reason for restoring the ancient appellation.

The next local reference is as follows,—"The accomplished and enlightened emperor Suh-tsung rebuilt the Illustrious churches in 靈武 'Ling-woo' and four other places." The T'ang History states that this prince was proclaimed emperor at Ling-woo in 756, while his father was seeking refuge in the country now known as Sze-chuen, on occasion of the rebellion of Ngan Lo-shan. Ling-woo is the present 靈州 Ling-chow in Kan-suh. These five places are called 郡 *keun* on the tablet. This *keun* is the name of an ancient territorial division of the empire, which had changed its signification seven times previous to the T'ang dynasty. According to the geographical section of the T'ang History, about the year 618, the name *keun* was exchanged for that of 州 *chow* throughout the empire; about 742, the name *chow* was again exchanged for *keun*; and in 757, being the 2d year of Suh-tsung, the term *keun* was finally abandoned and *chow* again adopted instead.

The term *keun* occurs on one other occasion on the tablet, in the title of Koh Tsze-i, who is designated Prince of 汾陽 Fun yang *keun*. Although this title was conferred in 762, five years after the geographical abandonment of the word *keun*, yet as it is exactly confirmed by the biography of Koh Tsze-i, there is no room to doubt its authenticity; the term being probably retained in titles of nobility, long after the other application had ceased. Fun-yang in the province of Shan-si is still known by the same name.

A little lower down, there is another part of the empire referred to,—"When the Duke Koh Tsze-i at first conducted the military in 朔方 *so-fang* 'the northern region,' &c." This is the present prefecture of 寧夏 Ning-hea in Kan-suh, which was known about the time spoken of, by the names of Hea-chow, So-fang, and Ning-so, one of the districts included being also named So-sang. The same name occurs again in the title of the priest E-sze, who is called the "Associated secondary Military commissioner for *so-fang*, the Northern Region.

The last line states that this inscription was "written by Lew Sow yen, formerly Military superintendent for 台州 'Tai chow.'" This is the same as the present *Tai-chow* in Che-kiang, which first received that name in 622.

Another geographical notice occurs on the Chinese part of the inscription, where it is said of the priest E-sze, that—"from the distant city of (王舍 *Wang-shih*) 'Radjagriha,' he came to visit (中夏 *Chung-hea*) 'China.'" *Wang-shih*, literally "Royal residence" which is also the translation of the Sanscrit word Radjagriha, is the name of a city on the banks of the Ganges, which occurs in a number of Buddhist works. In the cyclopædia *Fa yuen choo lin*,[1] an extract from the *Shih urh yew king* "Classic of the twelve excursions," states that the city of 羅閱祇 *Lo-yue ke* "Radjagriha" is called in the 晉言 *Tsin yen* "language of China," the city of "Wang-shih;" and that it is reported to have been the city where the first kings of 摩迦陀 *Mo ka to* "Mogaddha" lived. The Buddhist traveller Heuen-tsang writes the name of this place 曷羅闍姞利呬 *Ko-lo-chay-keih-le-he*, which is merely another orthography of Radjagriha. As this was one of the most important of the Buddhist cities in India, it is natural to suppose that E-sze was a Buddhist priest.

There are many precedents in the national literature, for the use of *Chung-hea* as a designation of China. We find this term as early as the 3rd century, in an ode by Pan-Koo, the historian of the Han; and the two parts of the name are used separately in the same sense, in the *Shoo-king*, one of the oldest books in existence. One of these, 中國 *Chung-kwo* (the middle kingdom) occurs in the Section *Tsze-tsae*, of that classic,[1] and has been retained unchanged down to the present time, now more than 2,000 years, as an unfading tradition of those early times, when the ruling star was surrounded on all sides by a cluster of small feudatories, obedient to the commands of the sovereign. This name is also found twice on the tablet. The heading is,—"*Tablet of the dissemination in Chung-kwo,' of the Illustrious religion of Syria.*" The title gives,'—"*Tablet eulogizing the propagation of the Illustrious religion in Chung-kwo.*'" The name given for China on the Syriac porton of the tablet, is *Zinstan*. Those who discover China in the "Land of Sinim," in Isaiah, will probably find here an independent testimony in favour of their view, while the arguments that have been brought forward on that question, leave no doubt as to *Zinstan* here applying to China. Kirchers's "China Illustrata" may be consulted with advantage on the subject, and also an article on the "Land of Sinim" in the *Chinese Repository* for March 1844. It may be

1 Vol. 44, p. 13.

1 See Legge's translation of the *Shoo-king*, p. 487.

noticed moreover that the name used for China in Buddhist books long anterior to the date of this monument, is 支那 *Che-na*.[1] In an extract from a Syriac breviary, given by Kircher, the name for China only differs by one letter from that on the tablet. At a subsequent part of the Syriac, the term *Malche dizmo* occurs, which we have given "king of China;" but the more literal rendering would be "king of the Chinese."

In the Syric subscription above noticed, the priest Gabriel is called Ecclesiarch of Cumdan and "Sarag" It is very doubtful what place is here indicated by Sarag. Mosheim[2] says it is a city of southern China, quoting Ptolemy as his authority for the statement.

In a previous part of the subscription, mention is made of "Mailas, Priest of Balach a city of 'Turkestan.'" We find in the work of Mosheim above quoted,[3] a table taken from Assemani, of the Metropolitan seats of the Nestorians, in which Turkestan forms the 19th on the list.

There is still another national appellation in the Syriac portion, where it is said,—*Besnath alf utsgana eterten 'diavanoè.'* "In the year of the 'Greeks,' one thousand and ninety-two." It will be observed that the name *Iavanoè* (Ionians) employed here for the Greek nation, from *Javan*, the ancestor of the race, is quite in harmony with the usage of oriental literature, where this ancient term has been retained long after it was given up in the west.

Some official designations occur on the tablet, which it may not be out of place to mention. It is said,—"the Emperor sent his 宰臣 *Tsae-chin* (Prime minister) Duke Fang Heuen-ling" In the "Tang History" the same term *Tsae-chin* is applied to the prime ministers. At the establishment of the Tang dynasty, the duties of the *Tsae-seang* (Prime minister) were performed by th chief officers of the three *Sing* (tribunals,) denominated respectively *Chung-shoo ling* (Secondary minister of state,) *She chung* (Imperial attendant,) and *Shang-shoo ling* (Chief president;) who deliberated together respecting the goverment of the state, without the appointment of *Tsae-seang* as a separate office At a later period, the inferior ministers declined the duties of *Shang-shoo ling*, in consequence of the emperor Tae-tsung having himself formerly sustained that office Hence the *Puh-yays* became Chief officers of the *Shang-shoo sing* (President's tribunal,) and these with the

1 See *Notices of Chinese Buddhism*, by Rev. J. Edkin's, in the *Shanghai Almanack* for 1855

2 Historia Tartaroram Ecclesiastica, Appendix, p. 28.

3 Appendix, p. 2.

She chung and *Chung-shoo ling* were entitled *Tsae seang.* (*a*) According to the Biography of Fang Heuen-ling in the (T'ang History,) he was made 尙書左僕射 *Shang-shoo tso puh-yay* (Senior prime minister,) in 630, five years previous to the time alluded to in the above quotation, which so far presents a perfect agreement with facts.

Lower down, we read,—"When the Duke Koh Tsze-e, (中書令 *Chung-shoo ling*) 'Secondard minister of state,' &c." The office of *Chung-shoo ling* was first established during the Han dynasty, and underwent a variety of changes both with regard to the incumbent duties, and the name previous to the Tang. At the commencement of that dynasty, the designation was *Nuy she ling*; in 620, it was changed to *Chung shoo ling*; in 662, this was abandoned for that of *Yew seang*; in 670, the name *Chung shoo ling* was again restored; in 685, the name *Nuy she* was adopted instead; in 705, *Chung shoo ling* was renewed; in 713, this was changed for *Tsze we ling*; in 717, the name *Chung shoo ling* was again adopted; and was once more changed to that of *Yew seang* in 742; this last was replaced by *Chung shoo ling* in 757, the same year in which the Tang History informs us that Koh Tsze-e was promoted to that dignity and just about the time alluded to on the tablet, when he was gaining honours by the reduction of the insurgents in So-fang.

Again it is said,—"In 742, orders were given to the 大將軍 *Ta tseang-keun* (Great general,) Kaou Leih-sze, &c.," and his biography states that in that same year he was made 冠軍大將軍 *Kwan-keun ta tseang keun*, (Army-controlling Great general,) and 右監門衛大將軍 *Yew keen-mun wei ta tseang keun* (Inferior guardian of the gate Great general.) The *Ta tsiang-keun* was a military title first used during the latter part of the 3rd century B.C. and employed in later times, with a great variety of prefixes. We find the first mention of the *Kwan-keun ta tsiang keun*, about the end of the 5th century, and after a number of changes, the name was re-established in 537. The title *Yew keen mun wei ta tseang keun* was first used in 624 (*b*)

Again the tablet has,—"Our great benefactor the 賜紫袈裟僧 *Tsze tsze kea sha seng* (Imperially conferred purple gown priest) Esze, 金紫光祿大夫 *Kin tsze kwang luh ta foo* (Titular Great statesman of the Banqueting house,) 同朔方節度副使 *Tung So-fang tsee too foo sze* (Associated secondary Military commissioner for the Northern Region,) and 試殿中監 *She Teen chung keen* (Examin

(*a*) *Wun heen tung kaou*, "Antiquarian researches," vol. 49., p. 5.
(*b*) *Tzih foo yuen kwei*, vol. 340, p p. 1, 5, 19, 20.

ation Pala e Overseer,) &c." Without hazarding a conjecture as to who this priest E-sze was, it seems evident from the elaborate array of titles appended to his name, that the writer intended to mark it with peculiar honour. Near about the time indicated here, we find the practice commencing of the emperors conferring gowns on members of the priesthood. The first notice of such occurs in 778, when it is said the emperor sent a purple robe on occasion of the death of the foreign priest Sun-to. The following year, a gown was conferred on the priest Ko-tsing, as a special token of imperial favor.(*c*) Another instance of the same distinction occurs in the subscription at the foot of the tablet, where the Assistant examiner is called the "*Tsze tsze kea-shu* (Imperially conferred purple gown) priest." The reader of middle age Chinese history does not need to be informed, that it was no rare occurrence for priests to occupy civil and military offices in the state, during the T'ang and preceding dynasties. Of the three titles here given, the first is merely an indication of rank, by which the bearer is entitled to a certain emolument from the state; the second is his title as an officer actively engaged in the imperial service; and the third is an honorary title, which gives to the possessor a certain status in the capital without any duties or emoluments connected therewith.

Tu foo is a dignity of very old standing in China, having been used during the Shang dynasty, at least 1200 years before the Christian era. The origin of *Kwang-luh* as prefixed to titles is to be found in the *Paou jin* (Caterer) of the Chow.(*d*) The name *Kwang-luh* itself was first used about a century before the Christian era;(*e*) and the title *Kwang-luh ta foo* was established in the beginning of the third century after Christ (*f*) Those who bore this title were privileged to wear a silver signet suspended from the waist by a blue tie; in 268 a new order was created, a grade higher, who wore a golden signet suspended by a purple tie, and were designated *Kin tsze kwang-luh ta foo*, while those of the old order were called *Yin tsing kwang-luh ta foo* (*g*)

The *Tsee too sze* was a military office introduced early in the seventh century, for the purpose of more effectually guarding the border territories; the first appointment having been made in 610.(*h*) With each *Tsee-too sze*, ten subordinate officers were appointed with

(*c*) *Do.*, vol. 52, p.p. 2, 3.
(*d*) *Do.*, vol. 620, p. 1.
(*e*) *Do.*, vol. 620, p. 3.
(*f*) *Do.*, vol. 620, p. 5.
(*g*) *Do.*, vol. 620, p. 10.
(*h*) *Wan hien tung kaou*, vol 59, p. 12.

the title of *Tung tsee-too foo sz* (*i*) The office of *So-fang tsee-too sze* was established in 721, with the object of keeping in check the Tartar hordes in the north (*j*) Koh Tsze-e received this commission in 754;(*k*) so that it is probable E-sze received his appointment as *Tung so-fang tsee-too foo sz'* soon after.

The office of *T'ien chung kien* was first established by the Wei dynasty, towards the end of the 3rd century, for the purpose of taking cognizance of various duties connected with the imperial household. The name underwent several changes previous to the Tang. In 662 it was changed to *Chung yu kien*; and in 670 the original name was restored, and continued to be used throughout the dynasty.(*l*) The practise of selecting a class of men by examination to fill the offices of government began with the Tang, and in 703 nominal offices were first conferred upon the successful candidates, with the word *She* (Examination) prefixed to the official title;(*m*) hence the designation of E-sze, *She T'ien chung kien.*

Another instance of the above mentioned use of *She* occurs in the Chinese part of the subscription, where the Assistant Examiner is styled 試太常卿 *She T'ae-chang king* "Examination High stateman of the Sacred rites." The duties of the *T'ae-chang king*, which are of very remote origin, appear to have risen from a desire to propitiate the spiritual powers. So early as the time of the ancient emperor Shun, we find two officers, Pih-e and Kwei, appointed to take charge of the sacrificial rites, and sacred music; and after more than a thousand years, the various charges connected with this branch of the public service during the Chow, were all under the control of an officer styled the *Ta Tsung-pih* or Minister of Rites. During the Tsin dynasty which succeeded, the name was changed to *Fung-chang*; and this was again changed to *T'ae-chang* at the commencement of the Han. From this to the T'ang, the name was several times changed, the office being always deemed one of high importance in the government. In 661 *T'ae-chang* was changed to *Fung-chang*; but *T'ae-chang* was again adopted in 670; in 701 this was replaced by the title *Sze-le*; and in 704 *T'ae-chang* was again restored, one officer with this title being termed *King*, while there were two inferiors named *Seaou king*.(*n*) But the priest Ye-le whose name is inscribed on the tablet, having the word *She* prefixed to his

(*i*) *Sin Tang shoo*, vol. 49, part 2, p. 4.
(*j*) *T'uh she fang yu ke yaou*, "Geography of the Historians," vol. 5, p. 41
(*k*) *Tung kien kang muh*, vol. 44, p. 23.
(*l*) *Wan hien tung kaou*, vol. 57, p. 1.
(*m*) *Sin Tang shoo*, vol. 45, p. 6.
(*n*) *Wan hien tung kaou*, vol. 55, p. 2.

title, it is seen by this that the title was merely nominal in his case, indicating a degree of rank far inferior to the officer above spoken of

The inscription is said to be "written by Lew Sew-yen (朝郎議 *Chaou e lang*) 'Secretary to Council,' formerly 司士參軍 *Sze sze san kwun* (Military superintendent) for Tae-chow." The *Chaou e lang* was a supernumerary office established during the Suy, and continued throughout the T'ang, but was not retained after the extincton of that dynasty (*o*)

The office of *Sze sze san kwun* appears to have existed as early as the Han, but there is no record of the duties pertaining to it at that time. From the time of the Northern Tsie, the post was filled by those distinguished for merit. During the Tang, they had charge of the construction of public buildings.(*p*)

The Chinese titles and designations of members of the hierarchy used on this tablet are all taken from the Buddhist vocabulary. Alopun, the Nestorian apostle, seems to have enjoyed great favour under both the emperors Tae-tsung and Kaou-tsung, by the latter of whom he was made 鎮國大法主 *Chin kwo ta fa choo* (Great conservator of doctrine for the preservation of the state.) The title *Chin-kwo* was conferred on various occasions during the T'ang, not only to members of the priesthood, but also to military officers, as a high mark of honour, indicating a degree of merit. A monastery in the district of Wan-nien, in the capital, was also distinguished as the *Chin-kwo sze*. The title *Ta fa choo* is obviously of Buddhist origin. The title in full is apparently the equivalent of the Syriac title given on the right side of the Chinese inscription,—*Papasi de Zinstan*, or "Metropolitan of China;" and if so, the priest Adam mentioned here, must have been a successor of Alopun.

A class of officers subordinate to this is noticed in the ode, where it is said that in the time of Kaou-tsung 法主 *Fa-choo* (Overseers of the church) were appointed in due form;" and at the end, it is said that "the *Fa choo* Ning-shoo had the charge of the congregations of the Illustrious, in the east," at the time the inscription was written. The first name on the margin in Syriac is "Mar Johanan, *Episcupo*." The identity of the Chinese *Fa choo* and the Syriac *Episcupo* is no unreasonable supposition, both being appropriately translated by the term "Bishop."

Another name of office occurs in the Chinese subscription, in the title of the priest Ye-le who is called 寺主 *Sze choo* (Chief pres-

(*o*) *Yen hein luy han*, vol. 97, p. 38.
(*p*) *Wan hien tung kaou*, vol. 63, p. 14.

byter.) In the Syriac subscription, the title "*Curapiscana*" is four times applied to the names of individuals, i.e. the Priest Adam, the Priest Jidbuzad twice, and the Priest Sargis. The latter name with the same title again occurs among the Syriac names on the margin. *Sze-choo* of the Chinese here naturally suggests itself as the translation of the Syriac *Curapiscupo*, giving the meaning of "Suffragan Bishop"

The term 僧 *Seng* being the transfer of the Sanscrit *Sangha*, which is the common designation for Buddhist priests, is used here in the title, where the composition is said to be the work of *King-tsing Seng* (priest) of the Syrian church. In T'ae-tsung's proclamation, he orders that the Syrian church in the E-ning Way be governed by twenty-one *Seng*. The same word is used on six other occasions in the inscription with the same meaning; it is applied to three names in the subscription; and fifty-nine names on the margin also have this term prefixed. The word "*Kasiso*" is used in the line of Syriac on the right side of the inscription, in the name Adam *Kasiso*; and five names in the Syriac part of the subscription are termed *Kasiso*; twenty-eight names on the margin also have this word appended. There is no doubt about the identity of the Chinese *Seng* and the Syriac *Kasiso*, the translation of both being "Priest."

On the inscription, we read again, that about the year 713, "there was the 僧首 *Seng show* (chief priest' Lo-han, &c.) At another part, Lo-han is called simply a *Seng*, but the previous quotation evidently marks a superior station in the Church. Probably the Syriac of this term is to be found in the subscription, where the Priest Gabriel is called *Rusch* or "Ecclesiarch" of Cumdan and Sarag.

In T'ae-tsung's proclamation, it is said,—"The 大德 *Ta tih* 'Greatly Virtuous' Alopun of the kingdom of Syria, &c." In an after part of the inscription, it is said that about the year 713 there was "the *Ta-teh* Kie-lih, &c." Lower down, the emperor Heuen-tsung is said to have commanded seven priests "together with the *Tuteh* Keih-ho to perform a service of merit, &c.". Among the names on the margin also, there is one "*Tuteh* Yaou-lun." This *Tuteh* is a term of very frequent occurrence in Buddhist books written during and previous to the T'ang, being applied as a title of courtesy to the tablet commemorative of the Indian Buddhist priest Puh-kung, in Si-ngan foo, which was erected the same year as the Nestorian tablet, according to the dates. In the title, he is called the *Tu-teh Ho-shang*. We find something nearly corresponding to

this also, in the use of the Syriac prefix *Mar* (Lord.) This occurs once in the single line down the left side of the inscription, in *Mar* John Joshua; twice in the Syriac subscript, in the names *Mar* Jazedbuzid, and *Mar* Sergius; and five times in the margin, in the names *Mar* John, *Mar* Sergius three times, and *Mar* Joseph.

In the first instance where Alopun is mentioned on the tablet, he is called the 上德 *Shang teh* (Most Virtuous) Alopun, which appears to be merely and intensiffication of the preceding term..

Among the Chinese names on the margin, there in one styled "老宿耶 *Laou suh-ya* Keu-mo," which is equivalent to our term "Doctor," Keu-mo.

Some other Syriac titles occur among the Ecclesiastical dignitaries. On the left side line, we find *abûdabahotha Mar Hana Jesua Kotholiko patriarchis* (The Chief Father, Lord John Joshua, the Universal Patriarch.) The identity of this title as the Patriarch of the Nestorians is at once obvious.

In the subscript, we have "Gabriel," *Arcadiakun* (Archdeacon,) and the some title occurs again in the margin, in "Aggens, Priest and *Arcodiakun* of the city of Cumdan."

Again in the subscript, there is "Adam, *Meschamschono* (Deacon.)"

It is deserving of remarks also how the author has contrived to vary his expressions in noting the several dates, thus giving evidence of a master hand in this style of composition. The first noticed is the arrival of Alopun, which took place in 貞觀九祀 *Chin kwan kiu sze* "the ninth year of *Chin-kwan*," this being the national name for the term of years beginning with the reign of Tae-tsung A.D. 627, making the year in question 635. The word *sze* which is employed here for year, was the term used for that during the Shang, and is found in the history of that dynasty in the Shoo-king, B.C. 1753.(*q*)

A little lower it is said,—That Tae-tsung issued the proclamation in 十二年秋七月 *Shih urh nien tsew tsih yue* (the twelfth year, autumn, in the seventh month.) This corresponds to the year A.D. 638,(*r*) The word *nien* which represents year here was first brought into use in the Chow dynasty B.C. 1134.(*s*)

Again it is stated, that—"In 聖歷年 *Shing le nien* (the years of *Shing-le*,) the Buddhists gaining power, &c." *Shing-le* is the

(*q*) See Legge's "Shoo-king," p. 191, &c.

(*r*) In the former part of this paper, the date 636 should be 635, and 639 should be 638.

(*s*) See Legge's "Shoo-king," p. 569.

name for the period commencing from the beginning of the Chinese year corresponding to our 698, and ending on 4th day of the 5th month in 700.(*t*) This was the fifteenth time the name had been changed during the reign of the empress Woo Tsih-tien.

Immediately following the last quotation, we read,—"In 先天末 *Sien tien mo* (the end of *Sien tien*,) &c." We find the term *Sien tien* lasted from the beginning of the 8th month in 712, till the last day of the 11th month in 713; being just about the time of the accession of Heuen-tsung. On the 1st day of the 12th month' the name of the whole year was changed to the "1st of *Kai yuen*," so that the name *Sien tien* is omitted in some of the national chronologies.

Again it is said,—"In 天寶初 *Tien-paou tsoo*, (the beginning of *Tien-paou*,) orders were given to the Great general Kaou Leih-sze, &c." The term *Tien-paou* began on the first day of the first month of the year answering to our 742, which is no doubt the year alluded to here.

The next date mentioned, is—"In (三載 *San-tsai*) 'the 3rd year,' the priest Keih-ho in the kingdom of Syria, &c." It is a fact noted in the Chinese annals, that on the 1st day of the 3rd year of *Tienpaou*, 744, the word *nien* "year" was exchanged for *tsai*, which last continued to be used till the 4th day of the 2nd month, of the 1st year of *Kien-yuen*, 758, when it was abandoned for *nien* by authority of the emperor Suh-tsung. *Tsai* was the word used for year in the time of the ancient emperors Yaou and Shun, upwards of 23 centuries before the Christian era.(*u*)

The tablet is said to have been erected in 建中二年歲在作噩太蒭月七日大耀森文日 *Kien-chung urh nien, suy tsai tso-yo, 'tai-tsuh yue, tsih jeh, ta-yaou-sun wun jih* (the 2nd year of *kien-chung*, the year being in the sing *tso-yo*, the month *tai-tsuh*, seventh day, being *ta-yaou-sun-wun*, day.) The term *Kien chung* being on the 1st day of the Chinese year answering to our 780, which makes the date on the stone, the 2nd year, correspond to 781. When the year is said to be in *tso-yo*, this is a tradition of an ancient practice, according to which the year was chronicled by the progress of the planet Jupiter through the 12 signs of the zodiac. As it was found that the course of Jupiter through the whole circle occupied nearly twelve years. it was termed (*suy sing*) "the year star," each of the 12 years having a special designation, according to the sign

(*t*) Where the date 699 is given above, it should be altered to correspond to this.

(*u*) See Legge's "Shoo-king." p. 25.

then occupied by the planet. These 12 designations were made to correspond with the terms of the duodenary cycle, *Tsze*, *Chow*, *Yin*, &c., and in order to counterbalance the deficiency caused by the more rapid progress of Jupiter, one term of the cycle out of every 145 was abandoned. But in the course of time, the accelerated velocity of Jupiter showed this to be insufficient, and after the Western Han the terms of the cycle were continued uninterruptedly, without regard to the place of Jupiter in the heavens. The same phraseology however has been preserved down to later times, although the law that gave rise to it was lost to the Chinese for many centuries, and has been only recently recovered by the researches of modern native scholars. So that when this formula is met with in Chinese documents later than the Han, it is only to be taken as a synonym of the ordinary terms of the cycle, and not in any way indicative of the place of Jupiter at the time given. The name *tso-yo* is the equivalent of the term 酉 *yew*, the tenth in the cycle, being that of the date 781. The meaning of these twelve ancient designations is now unknown to the Chinese.(*w*)

The month is here called *Tai-tsuh*. This is a vestige of an extremely ancient terminology, to the origin of which it would be difficult to give a date. *Tai-tsuh* is the name of one of the twelve musical tubes; but this were also by a special contrivance used to determine the temperature of the earth during the twelve months of the year, and the seasons were fixed accordingly.(*x*) In an ancient calendar "*Yu ling*," found in the *Li ki* or "Book of Rites," the *Tai-tsuh* is called "the temperature tube of the first month of spring." Although these names have now gone out of general use in the calendar, the literati still frequently employ them as an embellishment to their compositions. The seventh day of this month is also called *Ta-yaou-sun-wun* day. No satisfactory explanation of this term has been given; it is possibly the name of some day peculiar to the sect. Some have given it as Sunday, which may be correct; for we find by calculation that the 7th day of the 1st month of that year being February 4th, actually fell on a Sunday. An independent calculation of the same problem, by a Chinese, according to the native method, giving the same result, may be seen in the Hongkong Chinese Serial, 遐迩貫珍 *He-urh kwei chin*, for September, 1855.

(*w*) These are to be found in the *Urh-ya*, probably the most ancient dictionary in existence, composed more than a thousand years before the Christian era.

(*x*) The names and proportions of these 12 tubes may be seen in Legge's "Shoo-king," p 48.

A further means of verifying this date is given in the Syriac at the foot, where the tablet is said to have been set up "in the year of the Greeks, one thousand and ninety two." There is no difficulty in identifying this date, for it is well known that the Greek or Syro-Macedonian era, being the one used by the Syrians, Arabs, and Jews, commenced in the autumn of the year B.C. 312.(*y*) So that the 312th year of that era ended in autumn of the year A.D. 1; Carrying the series down to the February of 781 reaches to about the middle of the year 1092 of the Greek era, exactly agreeing with the statement on the tablet.

Among the various doctrinal subjects which are touched upon in the introductory part of the inscription, there is one especially deserving of notice, as furnishing strong presumptive evidence of the Nestorian origin of this monument, where we find the expression, 我三一分身景尊彌施訶 *Ngo san-yih fun-shun tsun Me-she ho* "Our Triune, Divided in nature, Illustrious and Honourable Messiah;" and again in the Ode it is said, 分身出代 *Fun-shun chuh tai*, (Divided in nature, he entered the world.) The occurrence of the term *fun-shun* "Divided in nature," twice in the inscription, is sufficient to attract attention from the uncommon character of the expression; but when we remember the peculiar doctrines, on account of which the Nestorians separated from the church of Rome, there can be very little doubt as to the origin of this term. For had the inscription been composed by partisans of the Roman church, we cannot conceive that they would have been so inconsiderate as to employ an expression which, although by a forced interpretation they might accede to, yet would always be liable to construction in favour of the doctrine which they termed heresy, and that too just at the time when their opponents were making great efforts, and spreading widely through the countries of the east. For the same reason, there is as little ground to think that it was composed by Roman Catholics of later times, as some are prone to believe; for had it been so, it is incredible that they would designedly introduce an element, calculated to destroy the fact it was their intention to establish. The Jesuit Father Kircher has written a work to prove the genuineness of this tablet, in which he speaks of the Syrian preachers as tainted with the heresy of the detestable Nestorius (*a*) The characters *fun-shun* cannot be taken in the sense of "to give a body," as some have suggested; for although in some cases, *fun* may mean "to distribute," yet the violence done to the language by such a rendering here, is

(*y*) See Prideaux's "Old and New Testaments connected," vol. 1, p. 514
(*a*) La Chine Illustrée, p. 76.

too obvious to be admitted. The Chinese language is not wanting in terms, fully to express such an idea; while were a concise term descriptive of the Nestorian tenet required, it is doubtful whether a more adequate expression could be selected than *jun-shun*.

It should be observed in the second of the above phrases, that the word *tai* is used instead of 世 *she*, which is the usual term; this phraseology is peculiar to the Tang, and was employed in consequence of *she* being one of the characters in the name of the emperor 太"Tai"-tsung; his private name being *she-min*, and Chinese etiquette requiring that no subject of that dynasty should make use of such characters. This rule is observed even in the title of one of the succeeding emperors, who is designated 代 "Tai"-tsung, while under other circumstances his title would have been She-tsung. The same remark will apply to a sentence in the former part of the inscription, were it is said 同人出代 *Tung jin chuh tai*, "he appeared in the world as a man."

It has been remarked that for aught that there is peculiar to Nestorianism, the account of the incarnation might as well have proceeded from a partisan of the much disputed appellation *Theotokos*. But it may be added, that if there is nothing which can be viewed as peculiary Nestorian in the plain scriptural account which is given, 室女誕聖 *Shih neu tan shing* "a virgin gave birth to the Holy one," there is at least as little that can be taken controversially against that party, or even against the probability of its having emanated from them.

A Buddhist influence is observable in the term employed for "angel," 神天 *Shin tien;* the *tien* being the generic name for the various classes of *Devas* or Celestial beings, in the Buddhist mythology, and the qualifying term *shin* marking the essentially spiritual character of the agent.

Some interesting notes respecting the Sacred Scriptures are found in this inscription. After noticing the completion of the ancient dispensation, it speaks of the "preservation of twenty-seven Sacred Books," exactly the number we have in the New Testament. It states further that when Alopun arrived from Syria, "he brought the True Sacred Books," and adds, "the Sacred Books were translated in the imperial library." Tai-tsung also in his proclamation, states that "Alopun has brought his Sacred Books and images from Syria, and presented them at our chief capital." In the ode again it is stated that "the Scriptures were translated and churches built." From the prominent way in which the Scriptures are here mentioned on several occasions, it was probably considered a matter of import

ance with these Nestorian missionaries to have them disseminated among the Chinese. The mention of their being translated under imperial surveillance harmonises very accurately with what history informs us of the state of translatorial labours about that time, under the imperial patronage the Buddhist Heuen-tsang being engaged about the middle of the 7th century in his arduous labours on the Buddhist books, by special command. If the scriptures were translated then, and there is no reason to doubt it, it is possible some portion of this work may still be preserved in some of those depositories of literary treasures with which China abounds; no evidence of such a fact however has come to light in modern times. In the "Lettres' edifiantes" there is a notice by Gaubil in 1762 of a manuscript being found in the possession of a Mohammedan, the descendant of Christian or Jewish ancestors from the west, written in characters almost the same as those on the Christian monument in Shen-si. This was carefully copied, and the fac-simile forwarded to Parist It was afterwards examined by the Baron de Sacy, who pronounced it to be part of the Syriac version of the Old Testament with hymns and prayers, written in the Estrangelo character.

As the chief objector in modern times to the genuineness of this tablet is C. F. Neumann, Professor of Chinese, it may be well to glance at the objections which he brings forward. He says, (*b*) —"The authors of the inscription were Syrians, or at least of Syrian origin, and were in constant communication with the West,—how then comes it, that they describe Tatschin (the West) precisely as Chinese geography under the Tang does? Have the Spaniards and Portuguese, the Dutch and English, in the monuments which they have left on foreign soil, described Europe and their father-land according to truth, or according to the fabulous views of foreign nations?" A very little reflection is sufficient to remove any difficulty on this point. The Chinese from the earliest times, have always been careful to collect what information they could obtain respecting foreign nations, officers having been appointed, whose special duty it was to attend to this; not indeed by long and perilous voyages of discovery, but by minutely enquiring of the envoys from foreign parts, the national character and customs, the distance and extent of the countries, and a variety of particulars respecting the kingdoms to which they severally belonged; all which were chronicled in the state archives, and every accession to the previous information was

(*b*) We rely upon Professor Salisbury's paper on the Nestorian Tablet, for the statement of these objections, which is given as a quotation from the *Jahrbücker wissenschaftliche Kritik*, for 1830.

annexed to the national history at the close of each dynasty. In this manner together with the additional matter procured by several native travellers who visited foreign parts, the Chinese became possessed of a very respectable knowledge of other Asiatic nations, at a time when geographical science had certainly not made great progress in Europe; and indeed to the present day, the most authentic account of some countries is to be found in the Chinese annals. Had the Nestorians or other travellers from the West during the Tang brought with them any additional information of importance, the Chinese would certainly have availed themselves of the occasion. But there is no reason to conclude that because the authors of the inscription were of Syrian origin, they must therefore give an account of that father-land different from that found in the Chinese books, when these books were correct in their general statements on the subject. The presumption is that they would rather prefer such statements as the natives could at once recognise, and thus more easily direct attention to that country which it was their object to point out. Although there may be some difficulty now, in recognising the various national features alluded to on the stone, yet there is no proof whatever that it is a false record The Mohammedans in China are very numerous, and their ancestors were originally from the west; but we might look in vain among them for the preservation of any descriptions of the countries of their ancestors, more authentic than other Chinese possess. The Jews have been resident in China for a much longer period, but no records have been preserved by them of the country whence they came.

Neumann proceeds,—"Have the Chinese ever called India itself Tatschin, and was not the name given to the West, at the period of the inscription, Fulin?" It is not very obvious with what view the Professor introduces this sentence, as its tendency appears to nullify the force of the paragraph above noticed. But as this point seems to be given up, in a later article from his pen, it is unnecessary to notice it farther than to remark, that although the name Fulin is applied to that country in the T'ang History, yet Ta-tsin was the name by which it was generally known in the early part of the dynasty, and down to much later times this name was used, as can easily be proved by a reference to native Chinese works of the period.

"Upon the chronological error in respect to the Syrian patriarchs (of three ye. C), we will lay no particular stress; Rénaudot's ground is indeed untenable, for there was, especially under the Tang, much communication between eastern and western Asia." The error here hinted at is that the date given on the stone both

according to the Chinese and the Syriac being A D. 781, February 4th, the name of the Nestorian Patriarch for the time is given as John Joshua or Ananjesus, while history states that this Patriarch died in 778. It would be desirable to know at what period of the year his death took place, as, were it about the end of 778, the time elapsed between that and the date on the stone would not greatly exceed two years, instead of three; moreover the probability is that this inscription was written and cut some time before the date of its erection. Neumann speaks of there being much communication between eastern and western Asia during the Tang; but in view of the information that can now be obtained on this subject, there is no ground to believe that reports were annually passing between Syria and China; indeed considering the difficulties of such a hazardous enterprise, it is much more reasonable to assume that the arrival of strangers from the far west was a comparatively rare occurrence. Hence we see nothing forced in Rènaudot's supposition that the tidings of the Patriarch's death may not have reached the Christians in China when the monument was erected. Assemand's reference also is much to the point, when he draws attention to the fact, that there is a letter now in the Vatican, which was addressed by certain Nestorian bishops who had been sent to Malabar, to their Patriarch in Assyria about the year 1502, when he had been dead already two years. Another instance of a similar kind and more calculated to excite surprise, yet of undoubted authenticity is that Napier the inventor of logarithms died on the 4th April, 1617 On the 28th July, 1619, more than 2 years after his death, Kepler who had not yet heard of this event, addressed a letter to him describing the progress of his astronomical tables, in consequence of the aid derived from logarithmic computation. This letter is preserved in the "Memoirs of John Napier of Merchiston" published in Edinburgh, 1834. (*c*).

"But never, never, would a Chinese emperor, in a public decree have dared to say of a foreign doctrine: "it must be published throughout the land," without stirring up a revolt in the body of the nation, the Schukiao; never has a Chinese emperor caused the sacred Scriptures to be translated and made known through the whole empire (he specially commanded to publish it," &c.); never has an emperor caused a church to be built in his capital, and never were there churches standing in every city. We deny all this so decidedly, because in Chinese history, where even the slightest in

(*c*) This notice is taken from a review by Biot in the "Journal des Savants" for March, 1835.

clination of the emperors to the Taoists and Buddhists is noticed and blamed, not the remotest trace of it is to be found —And let it be now considered what an emperor it was who found the doctrine of Alopun so excellent,—it was the emperor who passes for a reinstator of the pure doctrine of Kung-tse, who declared: "there is no salvation out of the doctrine of the perfect wise man." The above reasoning no doubt appears very conclusive to the Professor, but unfortunately for his argument, we have a fact at hand which is of more weight than mere hypothesis. This imperial decree which is so offensive in his sight, is actually found in almost the same terms in the 49th vol. of the 唐會要 *Tang hwuy yaou* "Collection of important matters of the Tang," a book published during the Sung in 961; and now forming one in the imperial library *Sze koo chuen shoo*, the highest guarantee for its authenticity. The 平凉讀碑記 *P'ing-tsin tuh pei ke*, "Ping-tsin Supplementary Tablet Memorial," published in 1813, quotes (*d*) this proclamation in full from the tablet, and adds,—"This is substantially the same as that contained in the *Tang hwuy yaou*, except that the latter says "the (*Po-sze*) Persian priest Alopun," Persia being the original name of the kingdom of *Ta-tsin*. The *Chang-ngan che* erroneously gives Alosze." Neumann objects to the statement of there being "churches standing in every city," but this is not exactly what the stone says; the expression is 諸州 *Choo chow*, which may be translated "the various departments;" as *choo* does not always signify "without exception." Now this statement tallies remarkably with the extract from the imperial edict by Heuen-tsung, which we have already given, where it says "let this be complied with 諸府郡 *choo foo kiun* "through the various departments;" and the coincidence of the geographical terms here may be again noticed. As before remarked, the word *chow* was used from about 618 till 742, when it was exchanged for *foo* and *kiun*. The first quotation being in the time of Kaou-tsung, who reigned from 650 to 683, has the word *chow*; the second being in 745 the other terms are used in the same sense, which furnishes a strong collateral evidence of the truth of the former. Surely Professor Neumann has not read Chinese history very attentively, if he is ignorant of the great favours that have been conferred on the Buddhists at various times by the Chinese Emperors; and in particular this very Tai-tsung, who he looks upon as "the reinstator of the pure doctrine of Confucius," having received with honours the Buddhist Heuen-tsang on his return from his travels, with more than 600 of the Indian Buddhist sacred books, which this emperor set him to get translated under his own immediate patronage.(*e*)

(*d*) Vol. 7, p. 16. Teih-foo-yuen-kwei Vol. 51, p. 17.

The fact of the Nestorian religion having existed in China for many centuries is established upon such abundant evidence, and so generally credited, that it would be superfluous to adduce any proof, in reference to the doubts thrown out by Neumann; neither are the Syrian writers altogether silent on the subject as his remarks would imply.

The last argument brought forward by the "leader of the opposition," as Professor Salisbury terms him, is "that both the Chinese and the Syriac characters of the inscription are modern, not such as were in use in the eighth century." Neumann is certainly a bold man to stake his sinological reputation on this statement. Were there no other evidence either for or against the genuineness of the inscription, still the style of the hand-writing would form an overpowering argument in its favour with every Chinese of any literary pretension. There is probably no people in the world who pay so much attention to the various delicate distinctions of different hands; so that it is difficult for a foreigner to understand the minute shades of touch, by which they are able to classify with an accuracy truly astonishing, not merely the several dynasties, but the various schools of writing under each dynasty. A long list of names is on record of those who have distinguished themselves in this art, from very early times down to the present day; and few Chinese gentlemen of any taste would think of being without a set of impressions taken from stone tablets, as specimens of their works. There is a class of caligraphers who make a particular study of these old specimens, and pride themselves in being able to imitate them with a great degree of accuracy; and none are more highly esteemed or closely studied than the productions of the Tang artists; yet with all their care and practice, it is generally admitted that a modern imitation by the most skilful hand can never deceive a connoisseur. One of the most famous of this class in modern times, named 王文治 Wang Wan-che' has written a work called 快雨堂題跋 *Kwae-yu tang te po*, "Kwae-yu Hall Notes and Poster p-," containing notices of the most approved specimens of hand-writing ancient and modern. On the 10th page of the 3rd volume, noticing the Nestorian inscription, he says,—"This tablet, inscribed by Lew Sew-yen is a specimen of the style chiefly aimed at by Chaou *Yung luh* and is distinguished among the hand-writings of the Tang, for its extreme clearness, softness, elegance, and richness. The strokes of the characters on the tablet are slender, and not cut to a great

(c) *Tsih foo yuen kwei*, Vol. 51, p. 17.

depth; but the people of Shen-si in rubbing impressions from it, have always lost sight of the excellence of its character, in consequence of the rarity of those who are clever at this work. When I paid a visit to Si-ngan, Peih Tsew-fan holding office in Shen-si that same year, he took a general superintendence of the ancient tablets; this tablet was removed to the Kin-ching monastery, where he caused a building to be erected in which it was deposited, and gave it in charge to the head priest Singkwan, that people from other parts might not take impressions at pleasure. Having selected an expert workman, I had several very fine impressions taken, and having obtained the exact form, I became conscious of a superiority in it which the former copies did not exhibit." These remarks are deserving of attention as coming from a scholar who had attained the very highest rank. A great number of impressions must have been taken from this stone, for they are to be found in almost every city for sale, and there is no literary man of any standing but knows the character of this inscription and recognizes it immediately he hears the name; and when the suggestion is made to the natives of the probability of this being a forgery, the unanimous reply is that such a thing was never known in China, and furthermore that it could not possibly pass undetected; or were it attempted to pass off the Nestorian tablet for any date prior to or later than the Tang, it would be in vain, for the hand-writing would at once betray the period to which it belonged. With respect to the Syriac portion of the inscription, Professor Salisbury will be admitted to be a competent witness, and we have it upon his authority that—"the characters are unquestionably Estranghelo, Neumann's declaration to the contrary notwithstanding;" (*f*) nor will he be looked upon as one biased in favour of the tablet, since he gives it as his opinion "that the Jesuits of China could probably have had the Syriac part of it made up in India." (*g*)

Not only are the Chinese characters formed in exact accordance with every specimen of the period in question, but the evidence arising from the style of the composition is equally conclusive. The terse antithetic style of the Tang writers, with the extreme paucity of particles, forms a very conspicuous stage in the history of Chinese literature; and rare indeed is the attainment of those who are able to imitate it. The differences in style between the writers of various ages are so extremely well defined in China, that it would be a very hazardous undertaking for any one to try to pass off his work for

(*f*) On the genuineness of the so-called Nestorian monument, p. 410.
(*g*) Do., p. 410. The pointing is given here according to the original.

that of a former age and it would be no common production that could pass muster before the keen practised eyes of native critics The peculiarities of the Tang style are found very clearly marked in the Nestorian inscription, such as to afford the most convincing proof to the minds of native scholars. The influence of the three national religious sects may be traced in the phraseology. That the author was one of the literary class there is no room to doubt, as the work bespeaks one well versed in Confucian lore; while the various transfers and marked allusions to a foreign faith, must give it an air of mystery to the general run of Chinese readers. This mystery however disappears to one who is acquainted with Christian doctrines; and he finds the tenets of the Christian faith clothed in an elegance of diction, unobjectionable even to Chinese taste. Throughout the whole, there is an evident inclination to Buddhism, in the nomenclature adopted for the various ecclesiastical institutions; while Taouist phraseology and ideas are conspicuous in the imperial proclamation. This last peculiarity will be observed in most of the decrees of the Tang emperors, and is to be accounted for by the fact, that the imperial family looked upon Laou-keun the founder of Taouism as their ancestor, the name of both being Li.

We have thus glanced at the several points of evidence which appear to us most conspicuous, leaving out of view what is said on the subject by adherents of the Christian faith, foreign or native. We have given extracts from seventeen different native authors (and the number might be easily enlarged) respecting this tablet, each of whom has something peculiar to say regarding it; but we have not been able to discover the slightest hint of a suspicion as to its genuineness or authenticity. The discovery of the imperial proclamation it contains, also in a book of the Sung dynasty, and the record in two different works, one of the Sung and one of the Tang, of the existence of a foreign temple in the very spot indicated on the tablet, form a species of corroboration not to be over-looked while the testimony of this work as to other foreign temples about that time is valuable collateral evidence.

The *Chang-ngan che* quoting from the earlier work, gives a summary of the religious edifices in that city during the Tang i. e.: "64 Buddhist monasteries, 27 Buddhist nunneries, 10 Taouist monasteries, 6 Taouist nunneries, 2 Persian temples, and 4 chapels of the Heaven worshippers." (*h*) The imperial edict of 746, which is to be found in several Chinese books, speaks unmistakeably of the increase of these foreign religions in China. By a decree issued in 845 by the

(*h*) Vol. 7, p. 7.

emperor Wootsung, "all those belonging to the (*Ta-tsin*) 'Syrian and (*Muh-hoo*) 'Mohammedan' religious orders were commanded to retire to private life, and such foreigners as might be among them to return to their own countries." (*i*)

In a narrative given by two Arabian travellers, it is stated that 120 thousand Mohammedans, Jews, Christians and Parsees were slain during a revolution at Canfu in China, in the year 877. These Christians must certainly have been Nestorians. During succeeding ages, the Nestorians of China are mentioned on various occasions by Rubruquis, Plan Carpin, Marco Polo and others; and when the zealous Roman Catholic friar John de Monte Corvino arrived in China in the 13th century, at the commencement of the Yuen, he met with a good deal of opposition from this party, some curious details respecting which are given in a M. S. recently discovered in the imperial library at Paris. It is there said:—"In the city of Cambalech there is a sort of Christian schismatics whom they call Nestorians. They observe the customs and manners of the Greek Church, and are not obedient to the Holy Church of Rome aforesaid." "These Nestorians dwelling in the said empire of Cathay, number more than 30,000, and are very rich; but many of them fear the Christians. They have very beautiful and very holy churches with crosses and images in honour of God and of the saints. They receive from the said emperor several offices, and he grants them many privileges, and it is thought that if they would consent to unite and agree with these Minorites and with other good Christians who reside in this country, they might convert the whole of this country and the emperor to the true faith." Even down to the 16th century, traces of the existence of these people may be found. So that could any sufficient argument be adduced to show that this monument was fabricated by the Jesuits during the Ming dynasty, as some have asserted, it would still remain to be explained what could be their object in so doing. Were it merely to prove the existence of Christians in China during the 7th and 8th centuries, that was already amply proved from other sources. Was it to give the sanction of antiquity to the peculiar dogmas of their Church? That could scarcely be; for we find no distinguishing characteristic of the Roman Catholic religion on it, which is not applicable to other Christian communities. Had that been their object however, it is scarcely credible that they would have left so much on the point to mere inference, while they have

(*i*) *Hung-hien luh*, vol. 9, p. 7.

descended to so many minutiæ on apparently irrelevant matters, thus involving themselves to a high degree in the risk of detection, by details of persons, places, and events, which while they come with a natural air from a contemporary, would never repay the care and research which they would require on the part of a forger living eight or nine hundred years after the event. And yet it is remarkable that the more closely these various assailable points on the tablet are looked into, the more full and minute do we find the coincidence of times and circumstances.

With respect to the form of the writing and the style of the composition, any one living in China can have no difficulty in making up his mind on the subject; as indeed he may on every other part of the evidence; a careful attention to which will probably bring every one to the conviction of that which Chinese have never doubted, that if the Nestorian tablet can be proved a forgery, there are few existing memorials of by-gone dynasties, which can withstand the same style of argument.

ADVANCE OF A CHINESE GENERAL TO THE CASPIAN.

The above query of E. C. B. having just met my eye, although it s a long time now after date, yet as I am not aware that a full answer has appeared in *Notes and Queries*, a few remarks may not be deemed out of place.

The general referred to by the Marquis, is undoubtedly 班超 Pan Chaou, the brother of the historian of the Former Han. There is a biography of him in the History of the after Han, but the only passage in it at all implying an approach to the Caspian, is the sentence :—"Chaou then crossed the Tsung-ling range, and reached 縣度 *Hien-too*." Hien-too we are told is probably Hindoo-Cush.

In the History of the Tsin dynasty (A.D. 265-417) it is said :—

"In the time of the Han, Pan Chaou sent his subordinate 甘英 Kan Ying on an embassy to Rome. On entering the (Caspian ?) sea-going vessel, the people said to him :—'There are objects of deep solicitude on the ocean, and those who embark are exposed to distressing cares; if the envoy of the Han feels no earnest anxiety about his parents, his wife or children, then let him proceed.' Ying declined the voyage."

This intention of measuring arms with the Roman legions is mentioned in many European works. I will quote a passage specially on that point from Rémusat :—"Déjà, précédemment, ils étaient venus en conquérants jusque sur les bords de la mer Caspienne Dans le premier siècle de notre ère, un général Chinois, qui commandait dans ces contrées, examina, dans un conseil de guerre, s'il convenait d'envoyer un de ces lieutenants soumettre l'empire romain. Il renonça à ce projet par la crainte de fatiguer ses troupes qui avaient fait pourtant plus de trois quarts du chemin. Ainsi, tandis qu' Horace et Properce promettaient aux Césars la soumission

du pays des Sères, les Sères marchaient effectivement contre les Césars, et ne s'arrêtaient que fatigués de conquêtei à douze cents lieues des frontières de la Chine."*

I have not hit upon the passage in any Chinese work, where the subjugation of the Roman empire is spoken of; but Rémusat is too judicious a writer I think, to make the assertion without due authority. His other allusion to a feeling very prevalent among the Romans at the time, that Rome was destined to become the mistress of the world, and bring into subjection India, China, and the other nations of the east, is amply justified by a number of selections from Horace, Propertius and other writers about that period, in an elaborate article † by Reinaud in the Journal Asiatique, March to June, 1863.

* Melanges Posthumes, p. 348.

† Relations politiques et commerciales de l Empire Romain avec l'Asie Oriental.

THE SUBJUGATION OF CHAOU-SEEN.

[COREA]

The records of Chaou-seen commence with the adventures of Mwan the first king of that country, a member of the Wei family, and a native of the kingdom of Yen. (2) At an early period of the history of Yen, the territories of Chin fan and Chaou-seen were marked out on the state register as pertaining to that kingdom, and defensive ramparts were built accordingly.

On the extinction of the Ts'in dynasty of China, Yen formed part of the outside boundary land of Leaou-tung. (3)

When the house of Han came into power, in view of the difficulty of protecting such a distant domain, the ancient boundary wall of Leaou-tung was rebuilt, including all the country up to the river Pa as belonging to Yen. On the revolt of Lea the king of Yen, who went over to the Heung-noo, Mwan, who appears to have held a responsible post in the state, and was then left to mark out an independent course of action, collected over a thousand men of

(1) This fragment is a translation from the 95th Book of the *Tsëen Han-shoo*, or "History of the former Han dynasty" of China.

Chaou-sien is the ancient name of the country now known as the kingdom of Corea, and this is probably the most ancient record ex ant of the history of that state. It may serve as an example of the care with which the vicissitudes of every portion of the vast empire of China and its dependencies have been chronicled; and as it is probable, the exact position of Corea among the nations of the world, may, at no distant date become a question of public interest and discussion, it is hoped this humble contribution, may not be entirely without value.

(2) The kingdom of Yen covered the country occupied by the present metropolitan prefecture of Shun-tien; and the site of the capital was not far from the modern P' king.

(3) This name still exists as that of an extramural province, lying between the Great wall and Corea.

his own party, adopted the costume of the barbarian tribes, and bound his hair up in a knot after their fashion. Passing beyond the boundary with his party, he settled in the uninhabited country, entrenching himself behind double ramparts. There he gradually drew in to his service the barbarians of Chin-fan and Chaou-sien, as well as stragglers from the states of Yen and Tse. (1) With such subjects for the nucleus of a state, he assumed the *yôlk* of king and named his capital Wang-hien.

During the period occupied by the emperor Hwuy-tí and his mother Kaou-how (B. C. 194-180), when the internal affairs of the empire were assuming the form of a settled government, the governor general of Leaou-tung made a treaty with Mwan; by which the latter became a vassal of the Han, with authority to protect the barbarians outside the boundary wall, and put a stop to their plundering on the borders. It was also agreed, that if any of the petty chiefs wished to pay homage in person to the emperor, no impediment was to be thrown in their way.

When this transaction was reported at court, it received the imperial sanction; and thus Mwan was invested with military prestige and wealth to bring under subjection the neighbouring small territories. Chin-fan and Lin-tun both came to tender their submission, bringing with them an addition of several thousand *le* square to his kingdom. Mwan was succeeded by his son, of whom we hear nothing more; and the latter by his son Yew-k'eu, who increased the number of his subjects by many of the Han fugitives whom he enticed towards him. He never paid court in person; and when Chinfan or any of the neighbouring states wished to transmit memorials to the emperor, asking permission to visit the court, he was careful to intercept them.

Rumours of Yew-k'eu's conduct having reached the court, She Ho was sent to him in B. C. 109 with an imperial reprimand; but the king steadily refused to receive the rescript. When the envoy left, on reaching the boundary of the kingdom, he instigated his charioteer to mortally stab the escort, one of the royal princes of Chaou-seen named Chang. She Ho, then crossing the river with all speed, entered Leaoutung, made his way to the capital without delay, and reported that he had killed the Chaou-seen general The emperor, who made no particular enquiries, said She Ho had shed a glory

(1) An ancient seaboard kingdom, corresponding generally to the present province of Shantung and southern part of Chihli.

on his name; and as a reward for the service, made him Protector general of the tribes east of Leaou-tung. The post was a perilous one; for the king of Chaou-seen, resenting his treachery, sent a party of troops, who attacked and put him to death. When this act of vengeance came to the ears of the emperor, he resolved to send an army of convicts to attack Chaou-seen. Yang Po the House-boat general was commissioned with the enterprise; and left Tse in the autumn with his fleet, carrying fifty thousand Po-hae (1) troops; while the left general Seuen E. proceeded by Leaou-tung; the plan being for the two generals to concert a united attack on the stronghold of Chaou-seen. Yew k'eu on his part sent troops to check the invaders at the dangerous passages. Seuen E, with a numerous force, put the Leaou-tung troops in the van; and these being defeated and scattered, the greater number who returned suffered capital punishment, Yang Po, the head of seven thousand Tse men, advanced first on the city of Wang-hien, which was held by Yew k'eu. The king having by careful examination ascertained the small number of the invading force, issued from the city to meet them on the offensive Yang Po's army was defeated and fled, and the general finding himself deserted, also fled to the mountains. For more than ten days he was in retreat, trying to collect again his scattered forces. Seuen E attacked the Chaou-seen army on the west of the river Pa, but with no satisfactory result. Seeing the ill success that had attended the expedition of the two generals, the emperor resolved to send We Shan on a mission to the king, hoping that diplomacy might prevail where military force had failed. Yew k'eu received the envoy with every semblance of submission, and begged to tender his allegiance. In mitigation of his past conduct, he alleged that he thought the two generals had come to compass his death by unfair means, but now seeing the envoy's credentials, he desired above all to testify his loyalty. He sent his eldest son back with the envoy, to carry his thanks to the emperor; at the same time presenting five thousand horses, and an offer to supply the imperial army with provisions. More than ten thousand armed men accompanied the mission, and when about to cross the river, the Han envoy and Left general, suspecting treachery, said to the heir apparent, that as he had testified his loyalty to the Han, he ought to order his followers to leave their arms behind them. The heir-apparent on his part suspecting some foul play at the hands of the envoy and Left general, refused to

(1) A small territory located about the North East corner of the present Shantung province; the centre of which corresponded with the present Ninov department of Pin, of which the city is in N. lat. 37° 34, E. long. 118° 05

cross the river, and returned with his followers Wei Shan, on his return, detailed the circumstances to the emperor; by whose orders he was put to death for mismanaging the enterprise. The Left-general defeated the Chaou-seen army on the bank of the river Pa, and then advanced to the royal city, where he took up a position on the north and west sides. He was soon joined by Yang Po, who set his forces in array on the south side of the city. Yew-k'eu strengthened his defences, and held out for several months against the besiegers. The Han force was weakened by want of concert between the generals.

Seuen E, whose earlier experience had been chiefly within the precincts of the palace, had scarcely the tact to control the unruly spirits of a victorious army of Yen and Tae [1] troops. Yang Po who put to sea in command of the Tse forces, had already lost the greater number by defeat and flight. His first battle with Yew-k'eu had resulted in exhaustion, disgrace and the loss of men; and there was now an impression among the troops that their general would lose heart. While carrying on the siege, he constantly held out offers of peace to the king; but Seuen E attacked the stronghold with all his might. While matters were in this state, one of the high ministers of Chaou-seen sent a messenger privately under cover of the night to treat with Yang Po for his adhesion to the cause of Chaou-seen; but although several messages passed to and fro between the two, they could not come to a definite understanding. The two generals several times made arrangements for a united attack; but Yang Po, who was always in expectation of coming to terms with the Chaou-seen dignitaries, took care to evade his part in the enterprise. Seuen E also sent a messenger to the besieged, with the hope that some loophole would turn up, by which the king of Chaou-seen might see his way to give in his submission; but the king refused to listen to him,—always clinging to the hope that he might gain over Yang Po. Thus by their cross purposes, the two commanders utterly failed in reaching any satisfactory result. In view of the fact that Yang Po had on the previous occasion been guilty of losing his army and now being on amicable terms with Chaou-seen, while that state still refused to submit, Seuen E suspected Yang Po of harbouring rebellious intentions, which he had not ventured to divulge. The emperor being informed of the unsatis-

(1) The chief city of that state corresponded to the present minor departmental city of Yü, in N. lat. 39° 50′ 54″, E. long. 114° 36′.

factory state of the siege remarked:—"At first when the generals were unable to advance against the city, I sent Wei Shan, who obtained the formal submission of Yew-k'eu; but before negotiations could be completed, through the mistakes of the envoy and the Left general, the military interfered to break through the compact. Now the two generals are surrounding the city, but through their perverse alienation, they have been long occupied in the siege with no decisive result. Let Kung-sun Suy, formerly governor-general of Tse-nan [1] proceed to the scene of action to adjust matters; and let him follow the course which prudence may dictate." On the arrival of Kung-sun Suy, Seuen E said to him:—"Chaou-seen ought to have surrendered long ago; that it has not done so is due to the fact that on several occasions Yang Po failed to come up to his agreement." He then stated his views to the envoy, to the following effect:—"Now remaining like this inactive will, I fear, prove prejudicial in the extreme to the interests of the empire; and that not merely as regards Yang Po, but it will expose our army to utter extermination by Chaou-seen." Kung-sun Suy quite agreed with what Seuen E had said, and by virtue of his powers, summoned Yang Po to the Left general's camp to deliberate on business. In compliance with an intimation from the envoy, Seuen E caused his subordinates to seize and bind Yang Po. The two armies were then united, and the transaction was reported to the emperor, who approved the action of Kung-sun Suy. The combined army under the leadership of Seuen E, made a most determined attack on the Chaou-seen stronghold, which seems to have told to some purpose; for the council of Chaou-seen magnates, consisting of the commander Loo-jin, the commander Han Taou, Ne-ke, the commander Tsan, and the general Wang Kee, held a consultation, in which they came to the following conclusion:—"At first we thought to gain Yang Po over to our side, but now he is in bonds; and the Left general himself being in command of the united army, his attacks are still more violent; and it is to be feared we shall not be able to stand out against him. Still the king would not surrender. Han Taou, Wang Kee, and Loo-jin, all fled to tender their submission, but Loo-jin lost his life on the way.

In the summer of B. C. 108, Ne-ke and the commander Tsan employed men to assassinate Yew k'eu the king of Chaou-seen, and

(2) Corresponding generally with the present prefecture of the same name, of which the chief city is in N. lat. 39° 44′ 24″, E. long. 117° 07′ 30″.

then went over to tender their submission Still the city of Wang-hien was not captured, and Ching-sze a high minister of the late king, resolved to hold out against the Han troops, and even organized an attack on the army. Consequent on this movement, Seuen E sent Chang the son of Yew-k'eu, and Tsuy the son of the surrendered general Loo-jin issued a notification for the information of the people, who thereupon put Ching Sze to death. Kung-sun Suy having thus pacified Chaou-seen, he divided the country into the four regions of Chin-tan, Lin-tun, Lo-lang, and Heuen-too. Tsan was promoted marquis of Hwa-tsing. Han Taou was made marquis of Ts'ew-tsoo. Wang Kĕĕ was made marquis of Ping-chow. Chang was made marquis of Ko. Tsuy—a consequence of the great merit acquired by his late father—was made marquis of Nĕĕ yang. Seuen E appeared in answer to a summons, and was adjudged, as having by mutual jealousy and perverse schemes striven with his colleague for his own glory; for which he was cashiered. The verdict on Yang Po was that when his troops reached Liehkow, (1) he ought to have waited for Seuen E to join him with his force: instead of which, dashing forward on his own responsibility, he had lost the greater part of his troops. He ought to suffer capital punishment; but being reprieved, he is reduced to the status of the common people.

(1) The port at which the boats first touched after crossing the sea.

ON THE KNOWLEDGE OF A WEEKLY SABBATH IN CHINA.

Some months back, question of considerable interest was opened up in the pages of "Notes and Queries," as to the existence in China of any traces of a Christian Sabbath. As that serial is now defunct, it may not be amiss to resume the ventilation of the subject in the columns of the *Chinese Recorder*. It appears to me that the most notable piece of information brought forward in the discussion is by C. D. of Amoy, in the following words:—

"The most remarkable trace that I have found is that in the edition of the Imperial Almanac published at Chinchew, and used at Amoy and all the country round; the Christian Sabbath is *invariably* marked by the character "Mih" 密 (pronounced in Amoy *bit*) which means "secret," "quiet" or "silent." I have been told that it is also found in the almanacs published at Fuh-chau, but I am not sure of that. As to the fact of its universal use at Amoy and Chin-chew there can be no doubt. I have not met with any heathen who can throw any light on the meaning or history of this remarkable character as it stands in the almanac, though I have made enquiries both among the literati and at the office in Chin-chew where it is published. The only trace of its meaning (excepting of course the plain and unmistakeable sense of *the word itself*) as used by the Chinese at present, is that it is *always* placed in that part of the page which contains the inauspicious elements of each day, which make it unlucky for doing work. This seems clearly to prove that the original use of the phrase was to indicate *a day of rest*; the actual use of the day has died out: the very use in all other cases of the phrase "mih jih" is lost, but there it still stands every year in the heathen almanac, a silent witness that it is a day on which work should not be done."

Mr. C. D. concludes by expressing the hope that "some one may be able to throw more light on this extremely interesting subject."[1]

Having been a little more successful in my enquiries than C. D. and believing that I have a glimmering of light on the subject, it will not seem out of place to communicate the result to *The Recorder*.

Let me premise, that when at Amoy I procured a copy of the Almanac in question, where the *mih jih* was certainly recorded throughout under every Sunday, but there was not a word of explanation in the volume as to the meaning of the term. A few days ago however, I met with a copy of another edition of the same almanac[2] in Shanghae, in which I find three leaves of prolegomena, and a mass of other matter, which is altogether missing in the one got at Amoy. The prolegomena consist of explanations regarding the matters contained in the volume; and the seventh article gives a precise solution of C D's difficulty; but curiously it furnishes also a reason why the "*mih* day" should be omitted from the almanac; so that it looks as if it did not exactly fit into the place where it is found.

Turning then to the imperially authorized manual of Astrology, 欽定協紀辦方書 *Kin ting hëë ki peen fang shoo*, I find the passage in question is a verbatim copy of one of a long series of articles which were presented in a memorial to the throne in 1740, praying for a thorough revision of the contents of the national almanac. It reads thus:—"In the 時憲書 *She hien shoo*, "Imperial Almanac," the 伏斷 *Fuh-tuan*, "Suppressed" days, the 密 *Mih* days, and the 裁衣 *Tsae i*, "Cutting-out clothes" days, are all calculated according to the occurrence of the constellations. We find on investigation, that the method of selecting times by the twenty-eight constellations of the Zodiac, came from Central Asia.[3] The suppressions depend upon the pairing of the days with the constellations, theoretically similar to the 旬空 *Seun kung*, "Decade blanks" and 路空 *Loo kung*, "Road blanks" and are consistent with principle. As to the *mih* days, they are marked by the four constellations 房 *Fang*, 虛 *Heu*, 昴 *Maou* and 星 *Sing*, which correspond among the seven

(1) Notes and Queries for China and Japan. Vol. 4. p.p.

(2) 洪潮和曾孫堂燕通書便覽 *Hung tsaou ho tsung sun t'ang yen t'ung shoo pien lan*. This almanac is of a reputation equal to Francis Moore's "Vox Stellarum," in england; and is to be found for sale in many of the principal cities of southern and middle China.

(3) In Chinese 西城 *Se-yih*, "Western regions," a name applied to the countries lying on the west of China

planets[4] with 日 *Jih.* "the Sun," called in the language of the West, *mih*, the ruler of joyful events; so that in China, interments and the opening of mortuary sheds are avoided on those days. Now we find by examination, that in central Asia, the twenty-eight constellations are apportioned in rotation among the seven planets, for registering the days; each day being suitable for certain things and unsuitable for others; entirely different from the customs of China. Merely to adopt the *Mih* day from among these is utterly indefensible. Finally, to say that the thirteen days marked by the constellations 角 *Kéo*, 亢 *Kang*, 房 *Fang*, 斗 *Tow*, 牛 *Neu*, 虛 *Heu*, 壁 *Peih*, 奎 *Kwei*, 婁 *Low*, 鬼 *Kwei*, 張 *Chang*, 翼 *Yih*, and 軫 *Chin*, are suitable for cutting out clothes, has no reason in it, so that both these ought to be rejected."

From this passage we see that the "*Mih day*" is actually and literally "SUN-DAY, and we learn also that it was formerly marked in the almanaces issued by the supreme Board at Peking. Probably the Chin-chew publication is the only almanac that still retains it, and it is remarkable that *it* should continue to publish its condemnation also. It may be however, as we shall see presently, that its original admission into the state calendar had a deeper significance than the censor who penned the above passage was aware of. When about leaving Amoy, through the assistance of a missionary friend, I was enabled to get the opinion of an astrologer on the subject, and the answer he gave was the day on which the people formerly used to worship the sun. Being just on the point of starting for Foochow, I had not then an opportunity of pursuing the investigation farther; but the perfect agreement of this reply with the explanation given in the passage quoted, shews that it was something more than a random shot, and opens up a train of ideas carrying us far back into heathen mythology.

In the explanation above given, a practice is referred to, which is is not of extreme antiquity in China,—that of pairing in regular sequence, the twenty-eight constellations, with the Sun, Moon and five planets, as applied in rotation to the days,—but a practice

(4) In Chinese 七五 *Tseih-ching* "Seven regulators," a name applied to the Sun, Moon, Mercury, Venus, Mars, Jupiter and Saturn. Some suppose the term was used in ancient times to designate the seven bright stars of Ursa major which subsequently by an astrological device, were associated with the seven planets; so that by metonomy, the latter became the established meaning. This opinion however is by no means generally received

which has become to some extent familiarized in connection with astrological schemes. In the 1st book of the *Hwĕ ke peen fang shoo*, there is a short section on this subject, and as it is closely connected with the question under discussion and the septenary division of time, it may be worth while to translate the passage.

"*On the Association of the twenty-eight constellations with the days.*'

"In the Minutes of Research; it is said:—As the days are sixty, and the constellations twenty eight, it follows that four hundred and twenty is a complete cycle, being a common multiple of sixty and twenty eight; hence the source of the seven sexagenary cycles The first day (甲子 *Kea tsze*) of the first cycle commences with the constellation 虛 *Heu*, and 子 *Tsze*, being represented by 鼠 *Shoo* "the Rat,"* the Rat thus becomes the synonym of *Heu*. The first day of the second cycle begins with 奎 *Kwei*; the first of the third is 畢 *Peih*; the first of the fourth is 奎 *Kwei*; the first of the fifth is 翼 *Yih*; the first of the sixth is 氐 *Te*; and the first of the seventh is 箕 *Ke*. When the seventh cycle is completed, the series again commences with *Heu* for the first day, proceeds to completion and again begins as before. But in what year, month and day the first cycle began is beyond the reach of investigation. Now as the Sun, Moon and planets revolve through the twenty-eight stations, at varying rates of velocity, each has its own order of succession, conjunction, deviation, perturbation, retardation, immobility, concealment, retrogression and irregularity. If all these are calculated up to the chronological epoch, the result will be first day of the sexagenary cycle, the year, the month, day and hour. The Sun will be in 虛 *Heu*; the Moon in 危 *Wei*, and the five Planets successively in 室 *Shih*, 壁 *Peih*, 奎 *Kwei*, 婁 *Low* and 胃 *Wei* But the moon immediately outstrips its limits; how can it be again reduced to the requisite order while passing through the stations from 昴 *Maou* to 鬼 *Kwei*? In consequence of the irregularities of the celestial motions, certain fixed stations have been determined on, according to the principle of utter absurdity. Whence arose the practice of pairing the seven planets with the twenty eight constellations? We made extensive search through books, in order to get some information regarding this, but without success, until we met with the 西域吉凶時日善惡宿曜經 *Se yih heih heung she jeh shen ngŏ sew yaou King*, "Western classic of lucky and unlucky

* The practice of associating the twelve animals of the duodenary cycle with the successive constellations is explained in the preceding article in the *Hwĕ ke peen fang shoo*.

days, and hours, and good and evil planets and constellations."* From this we learn that in the country in question, they are ignorant of the denary and duodenary cycle, and use the twenty-eight constellations to register the days; the seven planets being combined with the constellations, in the same way as the denary is combined with the duodenary cycle; not indeed implying that these planets are to be found in the corresponding constellations. In application of their rules, the planet and constellation which happen on a man's birthday preside over his fate, the latter being termed his "Fate constellation." To this add the planet and constellation marking any transaction. Try these by certain permutations, in order to ascertain their good or evil influence. Then combine the characteristics of the constellations and planets, with the degree of flexibility and compliance of the matter in question by which is determined the favourable or adverse character of the augury; similar to establishing or repudiating as used by astrologers in China. The constellations 虛 *Heu*, 昴 *Maou*, 星 *Sing*, and 房 *Fang* belong to 日 *Jih*, "the Sun;" 危 *Wei*, 畢 *Pĕih*, 張 *Chang* and 心 *Sin* belong to 月, *Yuĕ*, "*the Moon*;" 室 *Shih*, 觜 *Tsuy*, 翼 *Yih*, and 尾 *Wei*, to 火 *Ho*, "Mars;" 壁 *Peih*, 參 *Tsan*, 軫 *Chin*, and 箕 *Ke*, to 水 *Shwuy* "Mercury;" 奎 *Kwei*, 井 *Tsing*. 角 *Kŏo* and 斗 *Tow*, to 木 *Mŭh*, "Jupiter;" 婁 *Low*, 鬼 *Kwei*, 亢 *Kung* and 牛 *Neu*, to 金 *Kin*, 'Venus;" and 胃 *Wei*, 柳 *Lew*, 氐 *Te* and 女 *Neu*, to 土 *Too* "Saturn." For these, each language has its own names; take for instance,—日 *Jeh* or the Sun; in the 回鶻 *Hwuy-hwŭh* "Ouigour" language, they say, 密 *Mih*; in the 波斯 *Po-sze*

* It would probably be hopeless to except to get a sight of this book. The only information I can obtain regarding it, is in one of the articles in the memorial from which our first extract is taken. The article runs thus:—"In the Imperial Almanac, the excursionary positions of Venus do not agree with the actual directions. The rule is that on the 1st, 11th and 21st days of each month, it is in the east; on the 2nd, 12th and 22nd, it is in the South-east; revolving through the successive stations to the North-east, when the eight positions are complete; so that on the 9th, 19 and 29th days it is in the Central palace (Qu.? Nadir), and on the 10th, 20th and 30th in Heaven (Qu.? Zenith). Investigation shews that the star Venus accompanies the sun in its rising and setting, moving to the right while it either precedes or follows the sun at no great distance. How can it under these condition move to the left? Calculation utterly fails to solve the difficulty. The origin of the conception is found in the *Se yŭh keih heung she jeh shen ngo sew yaou king*. A thorough search through the Buddhist catalogues has failed to discover this classic, and we are at a loss to know from which of the 印度 *Yin tu*, "Indias" it has come; but it appears that in that country, the 3rd of each moon, as a rule is reckoned the 1st day, though sometimes the day of the First quarter, is reckoned the 1st, totally at variance with the institutions of new and full moon in China. So then when Venus is made to move to the left, this also is contrary to the solar positions of China; much more does it set all reason at defiance, and ought therefore to be rejected.

"Persian" language, 曜森勿 *Yaou-san-wuh;* and in the 天竺 *Teen-chŏ*, "Indian" language, 阿尒底耶 *A-ne-te-ya*; all which are the equivalents of 日 *Jeh*, 'the Sun' in Chinese. Similar remarks will apply to all the others. The completion and recommencement of the seven cycles is in thorough accordance with this. Again this book asserts that the same rule is used by all the nations on the west of China. We find that the rule for inserting in the Imperial Almanac, the several days of the sexagenary cycle, spread over the astronomical year, without their application, and the adoption of the Suppressions and 暗金 *Ngan-kin* "Darkened Venus," from among the spiritual inflictions, originated from the same source. The other matters are irrelevant; but since the outside nations use this plan of recording their years, it is well for astronomers to keep a note of it; as it will be found very advantageous as a means of indicating to the most distant regions and outlandish nations, that a given day is marked by certain characters in the cycle. Hence it must not be abandoned."

These two extracts then leave no doubt as to the meaning of the word *mĭh*; but the exact country from which it is derived is not so clear. In the only Ouigour vocabulary* to which I have access, the word for Sun is *Kün*, and the same word seems to run through most of the Turco Tartar Languages. It should be remembered, however, that the Ouigour language has been considerably modified since the conversion of the nation to Islamism, and possibly some terms—such as *mĭh*,—which have now become obsolete in the language as it exists, may still be preserved as exotics in the literature of other nations.

There is a Ouigour M. S. in the Imperial Library at Paris, the *Kaoudat-kou-bilik*, which is supposed to be the oldest composition known in that language. The 5th chapter contains a description of the seven planets, in which the Sun is termed *Ishik;*† but I suspect that is a symbolical designation, or it may be the name of the regent of that luminary, rather than the common word for the sun.

In several of the languages of Asia indeed, the term used for the sun is sufficiently near to *mĭh* or *bit*, to remove any suspicion as to the probability of the genuineness of such a transfer. In some of the Burmese dialects the word for "Sun" is suggestive of a cognate origin, thus:—

in Maplu, it is *Mu*.	Plă, it is *Mui*.
Pussuko, it is *Muma*.	Moitŭ, it is *Numit*.

* Klaproth's "Abhandlung über die sprache und Schrift der Uiguren."

† See David's "Grammaire Turke," p. 34.

The Lolo, a wild race in western China, neighbouring on Burmah, have *Mo-cha.*‡

In Tibetan it is *Nima.*

The word in a number of the Caucasian dialects is evidently related, such as *Buh, Baah, Bärch, Barje, Beri, Malch, Marra, Match, Mitchsi, Mitli.*

The word in the Finnish dialect is not so dissimilar as to render community of origin improbable; thus among others we find:—*Bewass, Chipass, Päim, Päiwäne, Päw, Pewaz, Peiwe, Pewen, Poïwa.*

Among the languages of North-eastern Asia and Polar America even, the same root seems to crop up occasionally.

In the Afghan language we find *Nmar*

But probably the closest resemblance is to be found among the Georgian and allied languages, thus:—

Mingrelian,	...	...	...	...	*Bsha.*
Suanian,	...	...	...	...	*Mj.*
Georgian,	...	...	...	...	*Mze.**

It may be a question, whether the same root does not appear in the Semitic languages, as in Hebrew, *Shemesh*, and Arabic, *Shems.*

It is to be remarked, that the term given as the equivalent of the Sun in India, i.e., *A-ne-te-ya*,† is the name of a divinity who

‡ See "The Miautsü," by the Rev. J. Edkins.

* Klaproth's "Asia polyglotta," passim.

† The slight discrepancy in the orthography between *Anetya* and the Sanscrit *Aditya*, is not in the least to be wondered at as a Chinese transfer. In the 佛說大孔雀咒王經 *Fuh shwŏ ta kung tsiŏ chow wang king*, as translated from the Sanscrit by the Chinese priest 義淨 E ting, during the Tang dynasty, we have the same word transcribed 阿姪底 *A-chih-te.* To remove anything like doubt as to the identity of the word, we have another translation of the same word, under the title 佛母大孔雀明王咒經 *Fuh moo ta kung tsiŏ ming wang chow king*, in which the translator instead of attempting to give the Sanscrit sounds, gives the Chinese equivalent 日 *jeh* the "sun," being the first in the list of the seven planets, placed in the exact order of our week. Who is this Aditya in Indian mythology? The following quotation from the "Translation of the Swrya-Siddhânta," by Burgess, will show:—"Vasueeva, the supreme principle of divinity.....having in the first place created the waters, deposited in them energy. That became a golden egg, on all sides enveloped in darkness: in it first became manifested the unrestrained, the everlasting one. He in the scripture is denominated the golden-wombed, the blessed: as being the first (âdi) existence, he is called Aditya; and being generator, the Sun. This sun, likewise named Savitar, the supreme source of light upon the border of darkness—he revolves, bringing beings into being, the creator of creatures, &c., &c." Upon this Professor Whitney points out a false etymology, and remarks that "*âditya* comes, not from *âdi*, 'first,' but from *âd-ti*, 'eternity.'" This then is the being to whom the first day of the week is dedicated; and as there was a wide spread and very ancient tradition that was the day on which our world was brought into existence, we cannot wonder at the numerous traces of honour being paid to the day, as found throughout heathendom.

presides over the Sun, and is not the common word in Sanscrit for Sun; nor do we find it frequently used for that purpose in Hindoo astronomical treatises. It does occur, however, sometimes, and we have an incidental evidence that it was the common word in use for Sunday in the 16th century. Thus, in the Ayeen Akbery, an account of India, written by the emperor Akbar, there is a table of the days of the week in that country, where Addittee is given as the title of the Sun in Sunday.

Here then is a well authenticated case of the knowledge of the week in China. Are any other traces of such a knowledge discoverable? I believe several such might be found, and will here refer to one which is at least as old in China as the preceding, and I think much older.

In the 九執歷 *Kew cheh leih*, a translation in the 8th century, by Gotamsida, a Hindoo missionary, of an Indian treatise on astronomy,* or rather astrology, there is an incontrovertible recognition of the hebdomedal period. The first chapter is on calculating the number of days elapsed from any given term, the lunar fraction, the day of the sexagenary cycle and the day of the week,—or which is the same thing, the day of the 七曜 *Tseih yaou* "seven planet" cycle. In the example given, after dividing the whole number by 7, there is a remainder of 5; and to illustrate the application of the rule to this number, the names of the days are given in the following order:—1. 熒惑 *Yung-hwo*, "Mars" (*dies Martis*). 2. 辰星 *Chin-sing*, "Mercury" (*dies Mercurii*). 3. 歲星 *Suy-sing*, "Jupiter" (*dies Jovis*). 4. 太白 *Tae-peh*, "Venus" (*dies Veneris*). 5. 填星 *Teen-sing*, "Saturn" (*dies Saturni*), which is the day sought.

The coincidence here between the order of the planets and days of our week, as also in the extract given above from the *Hëë-ke-peen-fang-shoo*, cannot but strike one as something remarkable; seeing it is not the natural order according to the Hindo astronomy on record. It is not difficult to suggest an explanation. The difficulty rather lies in choosing between the different solutions that have been proposed.

In the 佛國曆象編 *Fuh-kwo-leih-seang-peen*, a Japanese work, published in 1810, I find the following incidental remark, speaking of the Hindoo, 以七曜紀日不用甲乙 *E tseih yaou-ke-jeh-puh-yung-kea-yih*, "They register their days by the seven planets, and not by the denary cycle." (Book 1, p. 18.)

All writers on this subject have quoted Dion Cassius (3rd century A. D.) as the earliest authority, who remarks:—"that the custom of naming the days after the seven planets was first adopted by the Egyptains, and had in no very long time, been communicated by them to all other nations, especially the Romans, with whom it was then already quite familiarized." †

On this passage Biot observes:—"By the Egyptains he doubtless means the astrologers and new philosophers of the Alexandrian school, then much occupied in reviving and extending the abstract speculations of Plato and Pythagoras.....We may indeed trace the invention up to the Chaldeans; for knowing nothing, or next to nothing of their astrological doctrines, we are always safe in referring to them any matter on which we are in the dark." ‡

Dion Cassius gives two hypotheses to explain the naming of the days of the week. One of these has been given by Mr. Goodwin in Notes and Queries;* but as there is evidently a very importan typographical error in it, it will be well to reproduce the passage from Humboldt.—"If the hours of the day and the night are counted from the first (hour of the day), and this ascribed to Saturn, the following to Jupiter, the third to Mars, the fourth to the Sun, the fifth to Venus, the sixth to Mercury, the seventh to the Moon, always recommencing from the beginning; it will be found, if all the twenty four hours of the following day coincides with the Sun, the first of the third with the Moon; in short, the first hour of any one day coincides with the planet after which the day is named." † The planets here are placed in the assumed order of their distances from the earth as the centre of the system.

After shewing that this application of the names of the planets was not known at Rome in the days of Cicero, M. Biot continues:—

* This was translated by imperial command from the Sanscrit, but does not appear to have been authoritatively adopted by the astronomical Board In 733, there was a practical test of three systems; the 麟德 *Lin-teh*, which had been previously in use; the 大衍 *Ta-yen*, newly invented by 一行 *Yih-hing*, a native Buddhist priest and astronomer of some celebrity; and the *Kew-chih*. The result of the ordeal was that the *Ta-yen* proved correct in seven or eight cases out of ten; the *Lin-tih* in three or four, and the *Kew-chih* in only one or two. The consequence was that the latter was utterly rejected, and although the event is spoken of in many Chinese works, the translation itself is not preserved in the astronomical section of the dynastic history of the Tang. The only edition in print is to be found in the 開元占經 *Kae-yuen-chen-king*, but it is evidently full of typographical errors.

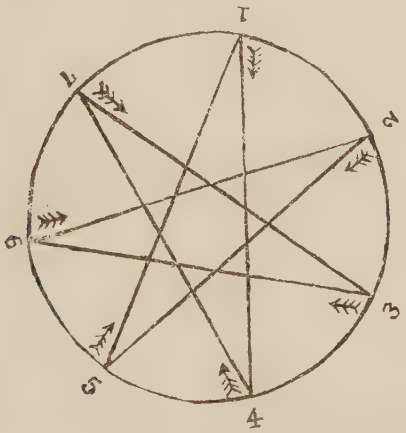
† Humboldt's "Cosmos." Vol. 4, p, 412. (Bohn's edition.)

‡ Etudes sur l'astronomie Indienne, pp. 98,99.

* Vol. 4, p 77.

† "Cosmos." Vol. 4, p. 415

"But, two centuries later, Dion represents these superstitious relations as having become to some extent national among the Romans, and he assigns two objects which form a sufficient key to their origin, these are to express, under a philosophic form the occult connexions between the parts of time and the order of the stars which regulate its succession; and also, to combine, in a single mathematical conception with the harmonic intervals of music, two great subjects of the imaginary speculations to which the Neo-Pythagoreans of Alexandria were addicted. This double mystery is revealed by an inspection of the annexed figure, which I borrow, slightly improved, from Scaliger, (*de Emendatione temporum*, book 1, p. 8) without knowing the source from which he has taken it.



1 Sun, 2 Venus, 3 Mercury, 4 Moon, 5 Saturn, 6 Jupiter, 7 Mars.

Divide the circumference of a circle into seven equal arcs, representing the parts of the heptachord. At the points of division place the signs of the sun, moon and planets, in the order given above. Connect these points four and four by a continuous series of chords, separating each pair by an interval of four. Then ascribing the first day to the sun, and commencing from this point, follow continuously the series of seven chords, in the direction indicated by the arrows. These will lead successively to the planets in the following order; Sun, Moon, Mars, Mercury, Jupiter, Venus, Saturn, answering to the several days of the week, and which were called in the 4th century of our era *the gods of the days*."*

* "Etudes sur l'astronomie Indienne," pp. 99-101.

A third way of explaining the names of the days of the week has been proposed by Letronne, i. e.—"The distribution of any three planets over a sign of the zodiac.....If these planets are separated, which in each of the signs are the first of the three, the succession of the planetary days in the week is obtained. (Virgo: Sun, Venus, Mercury; Libra: Moon, Saturn. Jupiter; Scorpio: Mars, Sun, Venus; Sagittarius: Mercury, &c.....which may here serve as an example for the first four days of the week; Dies Solis, Lunæ, Martis, Mercurii)."*

This theory he seems to have sustained on the evidence of an ancient Greek Kirgese zodiac preserved in the Louvre at Paris. In connection with this it may be remembered that the Chinese claim to have received from the Kirgese, a Turkish tribe closely allied to the Ouigours, ths cycle of twelve animals.† Possibly they may have got other astrological devices also from the same source.

As it appears that the above notions in regard to the division of time, were widely spread throughout the Roman empire in the beginning of the 3rd century, when the various nations of that empire adopted the Christian faith, the church was constrained to adopt the pagan nomenclature, which was too firmly rooted to give way, and has retained its place to the present dav. The Teutonic and Scandinavian nations, who adopted the same practice prior to the reception of Christianity, replaced the the Roman gods by their own national deities, retaining only the Sun, Moon and Saturn. Thus in the Anglo-Saxon, Mars is replaced by Tiu. making Tuesday; Mercury is supplanted by Woden. for Wednesday; Jupiter by Thor for Thursday; and Venus by Friga for Friday.

It has been seen that M. Biot repudiates the Chaldean origin of the week as ruled over by the seven planets. Humboldt expresses himself to the same effect, though his reasoning does not seen by any means conclusive. On the other hand, Mr. Goodwin, an authority to be much respected, is persuaded that Chaldea was the birth place of the institution.

This cycle is also found in the astronomical and astrological treatises of of the Hindoos, but none of these are of such an antiquity as to render it improbable that they received it from the Romans

* "Cosmos," Vol 4. pp. 415. 416.

† 文獻通考 *Wan-heen-t'ung-kaou* Book 342.

or the Greeks.* Should it however be made to appear, that the Hindoos were in possession of this cycle prior to the Christian era, of course the Neo-Pythagorean origin theory must fall to the ground and the way is open for the possibility of a Chaldean origin, or any other origin suited to the postulates.

Assuming however that the Hindoos received the cycle through the Romans or the Greeks, they have retained the use of the Sun, Moon and five Planets, substituting their own national deities as the regents, in place of the Roman gods.

At a later period, the Chinese seem to have received it from the Hindoos, merely using the names of the planets in the translation.

Here then we have two distinct channels through which our week has been introduced to the notice of the Chinese, previous to the arrival of Romish missionaries; one from India, in the 8th century or earlier, and the other from the Ouigours, which I fancy must have been much later. Although not prepared just at the moment to adduce any documentary evidence, yet I am strongly inclined to believe that it was not earlier than the 12th century. In either case the institution has never taken root among the Chinese, and the very existence of any record of a seven day week, is among the things confined to the knowledge of the archæologist. The retention of the solitary character *mih* in the Amoy almanac, is one of the few lingering traces, that are now all but inexplicable to the mass of the people.

Whatever may be the origin of the names of the days, however, there can scarcely be a doubt of the great antiquity of the use of a period of seven days. This is confirmed by some statements in the Mosaic writings, referring to pre-Judaic times. The knowledge of the zodiac of twenty-eight constellations, among most Asiatic nations, from the remotest ages, is presumptive evidence of a very high character; for if these were applied to the continuous numbering of a series of twenty-eight days, it is hard to believe that the shorter period of seven could escape being specially set apart. In China

* The number of Greek technical words found in the Hindoo astronomical treatises, seem sufficient indication of the source of much of their science; and especially as in connection with the present subject, the division of the day into twenty four hours is first found, and the name they use for hours, *horâ*, is obviously the Greek *'ora* there can scarcely be a doubt whence they derived this seven-planet cycle. In the notes to the *Kew-cheh-leih*, the Sanscrit sounds for several of the terms are given in Chinese characters: and among these we find one, 立多 *Lih-to* for the Sanscrit *liptâ*, which is from the Greek *lepton* and signifies a "minute" of a degree. (See Whitney's notes on the Surya-Siddhanta.)

indeed, where this zodiac is divided into four groups of seven,* corresponding respectively to the four cardinal points, the seven day period necessarily enters largely into the speculations of the astrologer, but the strong practical tendency of all their national institutions has been adverse to its general adoption by the people.

Another of the articles in the memorial, in the introduction to the *Hŏ-ke-peen-fang-shoo*, mentioning this cycle, notices one or two facts of some interest:—In the order of succession of the twenty-eight constellations, according to the Star lists and Uranographies, originally the constellation 嘴 *Tsuy* was before; and 參 *Tsan* after. When the selectors of times find the 酉 *Yew* day coincide with the constellation *Tsuy*, they suppress the day. Astrologers, in pairing the twenty-eight constellations with the seven planets adopt the following order—Sun, Moon, Mars, Mercury, Jupiter, Venus, Saturn. *Tsuy* belongs to Mars and *Tsan* to Mercury, as determined by the ancient order of succession. The 新法算書 *Sin fa swan shoo*† take a *Tsuy* star in advance of *Tsan* as a determinant, places *Tsan* before and after; so that the constellation *Tsuy* cannot come in contact with the 酉 *Yew* day; but astrologers consider that Mercury and Mars are thus transposed. We know that the determinants of the constellations are merely what men select, and have nothing to do with the accuracy of calculations. Again, as to the seven planets, the 羅睺 *Lo-how* (*Râhu*)* and 計都 *Ketoo* (*Ketu*) † of the Imperial almanac are the places of the moon's ascending and descending nodes. Anciently *Ráhu* was considered the ascending node; but the *Sin-fa-swan-shoo* makes it the descending node. Astrologers consider *Ráhu* to belong to Mars, and *Ketu* to Saturn; and say that the two are transposed now we find that there are really no such stars as *Ráhu* and *Ketu*; still less do the meanings of the words in any way affect the calculations. So then both these matters ought to be corrected, according to the ancient standard."

It is worthy of notice that the four constellations attributed to Sunday, are the respective centres of the four groups; and as the centre place is always the post of honour in China, and probably in other Asiatic nations also, it may be, that it is not without a special meaning that these constellations have been associated in theory with the sun. A similar thought suggests itself in view of the heptachord diagram in the preceding column.

† This was an astronomical thesaurus, drawn up by Longobardi, Terrence, Rho, Schaal and others, under imperial patronage, and published about the end of the Ming dynasty.

* The word *Râhu*, the Sanscrit name for the moon's ascending node.

† *Ketu*, the Sanscrit name for the moon's descending node.

The writer of this note points out a curious circumstance in connection with the zodiac in question, i. e. the transposition, while the week-day order of the planets is a standing testimony to the original sequence of these constellations. In order to understand this, it must be observed that the twenty-eight constellations are measured by one star selected from each as a determinant, and the distances of these vary among themselves in equatorial extent, in such an extraordinary manner, that while one reaches over more than thirty degrees, another is less than one degree, and this discrepancy is continually increasing. In the 3rd millenium before the Christian era (B. C. 2357), we find the measure of *Tsuy* was 2° 42'24", but by the perpetual variation taking place in the obliquity of the ecliptic, the circles of declination are necessarily undergoing a continual change also. From this cause it appears that the circle on which stands the determinant of *Tsuy* (Lambda Orionis, was actually crossed by that of the determinant of *Tsan* (Delta Orionis), about the 13th century of our era; since which time, *Tsuy* which was formerly in advance, *Tsan*, was in the year A. D. 1800, really 84'59" behind the latter, and by this time is still more so. * Thus we see that the statement made above that the two constellations *Tsuy* and *Tsan* have changed places, is literally true in the natural course of things. Notwithstanding this transposition, however, the traditional sequence is still preserved in the lists of the twenty-eight; and on reformation of the Chinese astronomy in 1683, by the European missionaries, the emperor strenuously opposed any change being made in the order of the ancient catalogues. † Such is the charcteristic tenacity of this people for the institutions of antiquity.

Many occurrences of the number of seven days, have been noticed in the popular customs, rites, superstitions and traditions of the natives; among which may be included the passage so often brought forward from the "Yih-king." All these are probably the relics of a very ancient observance of a seven days period, and it may be of a Sabbath in prehistoric ages, of which we may seek in vain for any account from the natives themselves. Much remains to be said on this subject, but I fear I have already overstepped the limits prescribed for an article in these pages. There is however one other point on which I would make a few remarks.

* Biot. "Recherches sur l'ancienne astronomie Chinoise," p. 95. (Reprinted) from the "Journal des Savants" for 1839-40).
Biot. "Etudes sur l'astronomie Indienne et sur l'astronomie Chinoise" p. 267.

† Souciet. "Observations mathematiques, astronomiques, geographiques, &c. Tome. 3, p. 80.

Dr. F. Porter Smith, who originated this discussion, concludes his communication thus:—"It may be observed that the characters 大耀森文日 *Ta-yau-san-wan-jeh* occurring on the Nestorian Tablet, are understood to refer to the Sabbath." ‡

Referring to this, C. D. says:—"Dr. F. P. Smith is probably correct in identifying the Nestorian Sen wên with the Sabbath, especially as the old sounds seem to be Sham-bun." *

Now the quotation given above from the *Hëë ke peen fang shoo* enables us to answer this question with greater certainty. We have seen there the reference to the Indian and Ouigour Sundays. Here we have a reference to the Sunday as introduced by the Christians. The Nestorian missionaries came from Persia, and doubtless transferred some Persian words in their teaching. The word in question is one such, and although the characters given by our authority, *Yaou-san-wuh*, are slightly different from those on the Nestorian tablet, yet we cannot fail to identify both one and the other, as an attempt to express the sound of *Yaksanbah*, the Persian word for Sunday. Probably an expert at the ancient Chinese sounds would discover a much closer phonetic resemblance. Whether C. D. is right in conjecturing that Sham-bun is a corruption of the word Sabbath, I do not know, but the Persian Dictionary gives no hint of any such derivation. *Sanbah* is the word for "day," and is also the name of Saturday, which may favour C. D's conjecture; while *yak* is "one"; so that *Yaksanbah* is equivalent to "First day"; Monday is *Dusanbah*, or "Second day," and so on. Etymology alone then might decide the question.

We have another confirmation, equally if not more conclusive, drawn from chronology. The date on the stone tablet, in which the expression occurs, stands thus; 建中二年歲在作噩太族月七日大耀森文日 *Kien-chung-ûrh-nëën-suy-tsai-tso-yo-tai-tsuh-yue-tseih-jeh-ta-yaou-san-wan-jeh.* Having already, in another place, entered minutely into an explanation of this date, it is needless to repeat it here. The translation in modern phraseology is:—"2nd year of Kien-chung (A. D. 781), on the 7th day of the 1st month, being the the great (*yak-sanbah*) Sunday," Now it is a very simple operation, with the aid of De Morgan's "Book of Almanacs," to ascertain that this day was February 4th, 781 (Old style), and that the day was actually Sunday, new moon

‡ "Notes and Queries." Vol. 4, p. 16.

Ibid. Vol. 4, p. 38

that year falling on January 20th. Why it is called the "Great Sunday," it not so clear to me. According to the present Church ritual, it would be the Fifth Sunday after Epiphany. But as the Feast of Epiphany is said to have been first observed in the year 813, it is improbable that the epithet has any reference to that. Any one having some acquaintance with the Nestorian calendar and rites, might be able to throw light on the question. Possibly it derived its significance from being the first Sunday in the Chinese year.

An independent calculation of this problem, by Le Shen-lan, the present Professor of Mathematics, in the Peking College, may be found in the Chinese Serial, 邊疆貢珍 *Hea-urh-kwei-chin*, for October, 1855; in which he proves the day to be Sunday. The piece is interesting as a specimen of Chinese mathematical chronology.

From the preceding statements, I maintain the historical fact of the introduction of the week day names into China, on at least three separate occasions. But although many traces of them, more or less distinct may still exist, yet we have reason to believe that the institution never became a popular or a national one. As to one day out of the seven being set apart as a Sabbath or day of rest, I see no indication of any such custom. The fact of a Septenary division of time in China, as in most other nations, however, appears to me of far greater antiquity than the preceding, and the question of a primeval Sabbath remains untouched by any evidence we can collect from Chinese records or tradition.

Perhaps some contributor to the Chinese Recorder may be able to shed more light on the subject.

Scientific.

THE MONGOL ASTRONOMICAL INSTRUMENTS IN PEKING.

Nearly every visitor to the city of Peking who makes a point of seeing the sights of the Cathayan metropolis, goes to look at the dilapidated structure known as the Observatory. Yet it may be safely said that not one in ten of those who look vaguely round on the fragile ruinous-like sheds, and ascend the long flight of steps to the terrace over the city wall, have an idea of the objects of interest that are before their eyes.

On the terrace are seen eight well-made bronze astronomical instruments, which were constructed under the direction and superintendence of the Jesuit missionaries two centuries ago, and remain there a standing memorial of the intelligent zeal of these persevering pioneers of Christian missions.

Some of the more enterprising, or those who are provided with a good cicerone, may find their way by a little-frequented path overgrown by tall rank weeds, and through a mass of rubbish, to a room on the ground in an obscure corner. The enthusiastic antiquary will be repaid for his trouble by a sight of the famous style and table, by which the illustrious Jesuits demonstrated to the Chinese court the superiority of European science. It is still *in situ*, apparently as they left it, but surrounded and covered by filth not to be described; and it would be well for those whose olfactory nerves are over sensitive to avoid the sacred spot.

Emerging again into the principal court, a close inspection will reveal a tablet over the central door of the sheds above alluded to. This bears the name of 湯若望 *Tang Jo-wang*, or "John Adam Schall," as Director of the Observatory, with the epithet 通微教師

T'ung-wei keaou-sze, "The Erudite Teacher," bestowed on him by the emperor.

In an adjoining room is preserved the clepsydra by which the astronomers worked, a curious memento of the horological science of the period.

The next room is devoted to an idol shrine, and is apparently the private chapel of the establishment.

Most of the other rooms round the enclosure are nominally devoted to the *employés* engaged in the computation of the calendar; and if the doors are open, incomplete copies of several of the rare old Jesuit astronomical books may be seen lying scattered about. But the whole place looks sufficiently dismal and deserted.

The most conspicuous objects in the courtyard are two large bronze astronomical instruments, enclosed respectively within two low brick-wall quadrangles. A very general impression seems to prevail that these also are the productions of the Jesuits. I have heard the statement repeatedly made, and have seen it more than once in print; and an eminent authority, on inspecting the photographs of these objects, has declared that they must have been made by the Jesuits about the end of the 17th century.

Better informed natives, however, state that they belong to a much earlier date, that they were made in fact during the Yuen dynasty. As genuine relics of the Mongol period then, and curious testimonies to the state of art and science at that time and place, I have thought that some documentary evidence might be interesting both in a historical and scientific point of view. A slight inspection of these objects is sufficient to convince any one who is tolerably familiar with the history of astronomical science in China that the antiquity assigned to them is no myth.

Looking over a well-known description of Peking, entitled 宸垣識畧 *Chin-yuen shih lëŏ*,[1] book V, p. 22, I find a brief notice of the Observatory to the following effect:—

"The Observatory is at the south-east corner of the (Tartar) city-wall, being raised above the parapet. It was built in the year A. D. 1279. In the centre is the 紫微殿 *Tsze-wei teen*, or "Palace of the (sidereal region) Tsze-wei;" inside of which are a pair of scrolls and a cross inscription in the imperial handwriting. On the terrace formerly stood the 渾天儀

[1] This work was written about the year 1788.

Hwan-teen e, "Armillary Sphere" (A), the 簡儀 *Keen e*,[1] "Compendium Instrument" (B), the 銅毬 *Tung kew*, "Bronze Globe" (C), and the 量天尺 *Leang-teen ch'ih*, "Sector" (D); all made by Ko Show-king during the Yuen dynasty. In 1673 these instruments having been found very unsuitable for use after so many years wear and tear six new ones were made by imperial order. There were the 天體儀 *T'een-T'e e*, "Celestial Globe," the 赤道儀 *Chih-taou e*, "Equinoctial Sphere," the 黃道儀 *Hwang-taou e*, "Zodiacal Sphere," the 地平經儀 *Te-p'ing king e*, "Azimutal Horizon," the 地平緯儀 *T'e-ping wei e*, "Quadrant," and the 紀限儀 *Ke-yen e*, "Sextant." These were placed on the terrace, and are used up to the present day. The old instruments were then removed and stored away at the foot of the terrace, etc."

Ko Show-king's name comes forward very prominently in the period of Chinese history to which he belongs, being alike celebrated as an astronomer and a hydrologist. I have before me three biographical notices of this scholar. One is in the 元史 *Yuen she*,[2] "History of the Yuen Dynasty," book clxiv, pp. 5—13. Another is in the 續弘簡錄 *Suh hung keen luh*,[3] "Supplement to the History of the Middle Ages," book xxxiii, pp. 1—13. This, though agreeing in the main with the *Yuen she*, gives some additional details. The third account is in the 疇人傳 *Chow jin chuen*, "Biography of Mathematicians," book xxv, pp. 1—15,[4] published under the name and patronage of 阮元 Yuen Yuen, the distinguished statesman, well known as Governor of Canton in the early part of the present century. This confines itself entirely to the astronomical part of Ko Show-king's life and labours, and in addition to what is given in the other two works it devotes a considerable space to a description of the instruments which form the subject of this paper.

As this latter portion of the memoir is a literal transcript from another section of the *Yuen she* I shall prefer quoting from the latter work, which is the more correct text.

[1] In the absence of a technical name for this instrument I have used the literal translation of the character *keen*, which may answer provisionally as well as any other term.

[2] Written by 宋濂 *Sung Lëen* and others early in the Ming dynasty (14th century).

[3] Published in 1699.

[4] The work was published in 1799.

We are told that 郭守敬 *Ko Show-king*, who bore the cognomen 若思 *Jŏ-sze*, was a native of 邢臺 *Hing-tae*[1] district, in the prefecture of 順德 *Shun tih*, and was born in the year 1231. In childhood he already began to give indications of remarkable power, and the ordinary sports of youth had no attraction for him. His grandfather 郭榮 *Kŏ Yung* was a scholar of high attainments, distinguished at once for his knowledge of the classics, his mathematical skill and his achievements in hydraulic engineering, and he was the contemporary and fellow-student of a circle of men who attained to eminence by their brilliant talents. It was one of the latter 劉秉忠 *Lew ping-chung*, under whose instruction he placed his grandson Show King.

It appears the attention he gave in his early days to the public waterways and means of transport first brought Ko Show-king into public notice; and in 1262 his patron 張文謙 *Chang Wan-keen* introduced him to Kubla Khan, who had recently ascended the throne of China. At an interview with the monarch he introduced and expounded six memorials on the canal and river-system of North China. The result seems to have been most favourable on the mind of Kubla, and led to the appointment of Show-king to the general control of the waterways of the empire.

The following year he received in addition a silver tablet from the emperor, with office of Deputy Commissioner of Rivers and Canals.

In 1264 we find him despatched on a mission with his friend Chang Wan-keen,—then Governor of 西夏 *Se-hea*, or the "Tanguth country,"—to inspect and report on the waterways in that region.

In 1265 he was made "Junior Inspector of the Metropolitan Waters," and planned some undertakings of great extent and importance.

In 1275, when the Mongol General Bayan was planning the subjugation of Hangchow, the Sung capital, Ko Show-king was ordered to inspect the province of Shantung and the region north of the Yellow River and draw out a plan for the passage of vessels between the two capitals.

More than half a century previous to this time, when Genghis Khan went on his great expedition into Central Asia, being

[1] N. lat. 37° 7′ 15″ E., long. 114° 39′ Greenwich.

accompanied by the famous statesman Yelu Chutsai, on the occasion of some discrepancies in the calendar becoming apparent, the latter drew the attention of Genghis to the insufficiency of the system of chronography then in use, and which had been used for two centuries. It was in fact appreciably in arrear of the actual state of the Heavens, and consequently threw the chronology of the empire altogether into confusion.

At a later period Lew Ping-chung memorialized the throne, proposing a thorough revision of the system, but he died soon after.

In 1276, when the principal part of North China had been pacified, Kubla turned his attention to Lew's suggestions. An office for the correction of the calendar was established, and Ko Show-king and 王恂 *Wang Seun* were appointed to superintend the practical working of the astronomical observations and calculations. Chang Wan-keen and Chang Yih were the Chief Commissioners, whose duties were to decide cases and present memorials to the throne; while 許衡 *Heu Hăng* arranged and prepared all business matters.

In his first report Ko Show-king set out with the statement that the right formation of the calendar depended primarily on the correct observation of the heavens; and for this latter purpose nothing was more essential than the gnomon. The Armillary Sphere then in use, he said, was made in the period *Hwang-yew* (A D. 1049—1053) for 汴京 *Peen-king*,[1] the capital of the Sang dynasty; and did not correspond with the Mongol capital in polar distance; the difference being more than four degrees. In the long course of years also the foundation stone of the style had become deflected from its true position. Ko Show-king calculated the amount of error and had it rectified.

He then selected an elevated ground with a clear atmosphere and constructed 簡儀 *Keen e*, "Compendium Instrument" (B).

He also made a 高表 *Kaou-peaou*, "Lofty Gnomon" (E), to compare observations with the preceding instrument.

The 候極儀 *How-keĭh e*, "Pole Observing Instrument" (J), he made for the more accurate determination of the position of the earth's axis.

The 渾天象 *Hwan-t'ëĕn seang*, "Celestial Globe" (C), he made to give a miniature representation of the sidereal heavens.

[1] The present 開封 *K'æ-fung*, the provincial city of Honan, N. lat. 34° 52′ 5″ E., long. 114° 33.

Although his was a correct representation of the sphere, yet being unsuited for practical observation to meet this want he constructed a 玲瓏儀 *Ling-lung e*, "Skeleton (Armillary) Sphere" (A).

Another of his inventions was the 仰儀 *Yang e*, "Height-observing Instrument" (G), which seems to have resembled a vase, the principle being the substitution of the circle for the square in observations of the sphere.[1]

The 立運儀 *Leih-yun e*, "Vertical Revolving Circle (H), he constructed as a substitute for the fixed meridian circles hitherto in use.

By the 證理儀 *Ching-li e*, "Verification Instrument" (I), he exhibited at once the paths of the sun and moon in the heavens.

To remedy the indistinctness and distortion of the shadow of the loft style he invented the 景符 *King-foo*, "Supplementary Light Vane" (J), forming the perforated gnomon.

To facilitate the observation of the shadow by moonlight he constructed the 闚几 *Kwei ke*, "Peeping Table" (K).

Another invention was the 日月食儀 *Jih yue shih e*, "Solar and Lunar Eclipse Instrument" (L), the right determination of these being a crucial point in chronography.

One of his inventions was a 星晷 *Sing kwei*, "Star Dial" (M).

Another was the 定時儀 *Ting-she e*, "Time Piece" (N).

He made also the 正方案 *Ching-fang gan*, "Adjusting Table" (O), for determining the true position.

The 九表懸 *Kew peaou heuen*, "Nine Signal Level" (P) was another invention.

The 正儀 *Ching e*, "Rectifying Instrument" (Q), was another invention, the precise character of which is not very clear.

The last in the list was the 座正儀 *Tso ching e*, "Horizontal Rectifying Instrument" (R).

Representations of these seventeen instruments were presented to the emperor, along with five plates representing respectively the

[1] Here we have probably a glimmering of the fact that the discovery of the theory of spherical Trigonometry is attributed to Ko Show-king. Gaubil says: "On ne dit pas comment *Cheou-king* se fit sa méthode, et on ne saurait décider si elle fut le fruit de ses recherches, ou bien si il l'apprit des Mathématiciens Etrangers qui étaient à la Cour." (Observations Mathématiques, etc., tom. ii, p. 115).

仰規 *Yang-kwei*, "Circle of Upward Observation," the 覆矩 *Fow kwei*, "Square of Downward Inspection," the 異方渾蓋 *E fang hwan kae*, "Spherical Concave of Foreign Regions," the 日出入 *Jih chŭh jih*, "Sunrise and Sunset," and 日永短 *Jih yung twan*, "The Longest and Shortest Days." These plates were all practical results derived from the above-named instruments.

Such is the list to Ko Show-king's inventions preserved to us in the *Yuen she*; to which I have appended capital letters for convenience of reference. The names of four instruments are given in the *Chin-yuen shih lëŏ* (see above) as the work of Kŏ Show-king. Only three of these—A, B and C—have I identified with those in the *Yuen she*; but I think the fourth—D—is probably the same as G of the *Yuen she* list.

Only two of these instruments appear to be now extant; and of these we have such a minute description (along with several of the others) in the *Yuen she* as to leave no reasonable doubt of their identity.

I venture to give here a translation of this description, which would have been extremely difficult, if not altogether impracticable, had I not obtained photographs of the instruments which now renders the piece for the most part exceedingly clear.

(B) 簡儀 *Keen e*, "Compendium Instrument."[1]

The "Compendium Instrument" is constructed in the following manner: There is a rectangular base frame 18 feet long and 12 feet wide. The framing is 6 inches wide above and 8 inches below, being 6 inches thick. Inside are three transverse bars and three longitudinal. Two of the latter extend from the southern end to the southernmost of the three transverse bars. The other extends from the northern end to the central transverse bar. A water-channel is cut round the four sides of the frame an inch deep and an inch and a half wide. At each of the four corners is a knee-support projecting two inches in thickness both inside and outside beyond the framing. A water-channel is also cut round the knee-supports, an inch in width and the same in depth, into which the water flows from all the four sides. Knee-supports are also placed at the centres of the east and west sides, 14 inches wide and 23 inches long, having the water-channel the same as the others.

[1] *Yuen-she*, book xlviii, ff. 2-5.

"The north-pole cloudy frame [1] has two standards, each four inches in diameter and 12 ft. 8 in. in length, with tortoise clouds at the base. These stand on the knee-supports at the north-east and north-west corners, gradually inclining towards each other, and sloping at the same angle as the equator, and ending in the normal ring.

"The normal circle is 2 ft. 4 in. in diameter, 1½ inches wide and 3 inches thick. In the middle are stretchers, intersecting in the form of an oblique cross, the same width and thickness as the normal ring. In the centre is an aperture half an inch deep on the upper side 1½ inches square, and the lower 2½ inches deep and one inch square, to receive the north pole axis pivot.

"At a height of 7 ft. 2 in. obliquely from where the cloudy frame standards rest on the base frame there is a transverse bar.[2] From the centre-line of the bar to the centre of the aperture in the normal circle is 6 ft. 8 in.

"There are also two dragon pillars[3] planted on the east and west central knee-supports, occupying the portion north of the central line, completely ornamented with dragons, the lower part in the form of hills. These are placed with a northern inclination to support the northern frame.

"The two south-pole cloudy frame standards are placed on the east and west central knee-supports, occupying the portion south of the central line, resembling the northern frame in width, thickness and form. They extend obliquely towards the south-west and south-east angles respectively, intersecting in the form of a cross,[4] the upper ends flush with the border of the diurnal circle,[5] at the points south-east and south-west. They are each 11 feet 5 in. in length, and their southern inclination is the same angle as the equator. At a distance of 3 ft. 8 in. obliquely from the knee-

[1] All the auxilliary portions which are not actually parts of the instrument are ornamented with clouds. The accompanying photograph is not taken in the most favourable position for shewing the whole of the casting. One of the stands of the north-pole cloudy frame is distinctly seen supporting the north-pole, but the other is hid by the instrument, with the exception of some diminutive portions, which a careful inspection will reveal through the openings.

[2] This is distinctly seen in the photograph covered with ornamental casting.

[3] The western of these two is clearly seen in the photograph, but the base-hill is hid by the brickwall.

[4] In the photograph one of the arms of the cross is effectually hid by the dragon in the foreground.

[5] Literally the 百刻環 *Pih K'eh Kwan*, "Hundred Part Circle"; the day being divided, at the time in question, into so many (*K'eh*, "cuttings," or) parts. The same word *K'eh* is now the expression for a "Quarter of an Hour," although there are only ninety-six in the day.

supports is a transverse bar,[1] which supports the diurnal circle's lower edge.

"There are also two dragon-pillars planted on the south-west and south-east knee-supports, which, inclining northward, form oblique supports to the ends of the cross standards. In form they resemble the northern dragon-pillars.

"The revolving meridian double circle is 6 feet in diameter, 2 inches wide and an inch in thickness. Between the two is an interstice of an inch, and they are connected together at the north, south, east and west points. At the north and south points are round apertures to receive the north and south pole axis pivots. The degrees and minutes of the celestial circle are cut round the circumference on both sides; beginning at the south pole and terminating at the north pole, where the old minutes are inserted. At a distance of four inches on each side of the north and south pivot apertures, are inserted straight stretchers of the same width and thickness as the circles. Between the centres of the two stretchers is a double brace east and wast connecting them together, also the same in width and thickness. The double brace is connected in the centre, forming a thickness of three inches, through which is an aperture four-fifths of an inch square, to receive the axis pivot of the traversing index bar. The index bar is 5 ft. 9⅞ inches long, the same width and thickness as the circle, and in the centre is a round aperture, half an inch diameter, to receive the axis. The two ends of the bar are shaped like a pointed sceptre, to facilitate the indications. Half an inch from each of the pointed ends are sight vanes 2½ inches high, the same width as the index bar and three-tenths of an inch thick. In the centre is a round aperture three-fifths of an inch diameter with a fiducial line down the centre for the delicate determination of degrees and minutes.

"The diurnal circle is 6 ft. 4 in. in diameter and two inches wide on the face. Round the circumference are distributed the twelve hours and the hundred divisions, each division consisting of thirty-six sub-divisions. The circle is two inches thick; from the middle of the thickness upward the circle is three inches wide, and there are cross stretchers upon which the equatorial circle rests. On the inner face of the diurnal circle four rollers are fixed, to enable the equatorial circle to rotate without obstruction. The

[1] This bar is also visible in the photograph.

diurnal circle is let in an inch deep into the south-pole frame and fixed there.

"The equatorial circle is like the revolving meridian circle in diameter, width and thickness. The circumference of the face is minutely divided into degrees and minutes according to the twenty-eight constellations. There are cross-stretchers in the middle, three inches wide, having a slit in the middle an inch wide and an inch thick. In the centre is an aperture an inch in diameter, to receive the south-pole axis pivot. There are two boundary index bars, each 5 ft. 9⅔ in. long and 3 in. wide. The ends of the index bars are tapered off for half an inch, and degrees and minutes engraved corresponding to those on the circle. In the centre is an aperture, by which they are both placed on the south-pole axis pivot over the equatorial circle. The two ends of the upper index bar, from the outer end of the slit to the extremity of the bar, are double thickness, to enable both the bars to revolve freely on the circle without the inconvenience of different heights; while it facilitates the observation of degrees and minutes.

"The north and south-pole axis pivots are both made of steel six inches long, half of which forms the shaft and half the axis. The dimensions of the shaft portion correspond to the aperture in the centre of the normal ring stretchers. The axis is an inch in diameter. A hole is made through the centre of the north-pole axis. At the bottom of this hole a transverse hole is drilled from side to side. A thread is passed up the centre, bent over and brought out at the two transverse holes and fastened at both sides. Three lengths of thread are passed through the hole and fastened. At the upper and lower ends respectively threads are carried down to the two ends of the index bars and passed through a hole, being sunk into the under side of the index bar along the centre line, of which a groove is cut to receive the thread. It is then carried along the middle of the slit to the centre of the index bar, and through a hole in the middle part the thread is passed up from the lower side of the index bar and fastened.[1]

"The 定極環 *Ting keih kwan*, "Pole determining Circle" (J), is half an inch wide and an inch thick, the position corresponding

[1] Whether this thread was a copper wire, or some less durable material the text does not indicate. It has probably disappeared from the instrument for centuries past, and of course no trace of it is to be seen in the photograph; but something like a small hole may be seen in the north-polar axis.

entirely with the vaulted sphere. The inside diameter is six degrees, each degree rather more than an inch. The pole star is three degrees distant from the true pole, and makes a barely perceptible revolution.[1] Inside the circle are oblique cross stretchers, the same as the circle in width and thickness, and connected with the upper part of the normal circle. In the centre of the stretchers is a hole a twentieth of an inch in diameter. The distance from the hole to the centre of the north polar axis below is 6½ inches.

"There is also a brass plate attached to the cross of the south-pole cloudy frame, two inches square and half an inch thick; the northern face being bevilled down inwards to a hundredth of an inch thick. In the centre is a round hole a tenth of an inch in diameter. From the centre of the hole down to the centre of the south-pole axis is also 6½ inches.

"There are two other circles. One is the 陰緯環 *Yin wei kwan*, "Circle of Occult Latitude," on the face of which are engraved the points of the compass. It is laid horizontally on the base frame; the centre being over the northern cross formed by the longitudinal and transverse bars.

"One is called the 立運環 *Leĭh yun kwan*, "Vertical Revolving Circle" (H), and has the degrees and minutes engraved on the face. It is placed under the standards of the north-pole cloudy frame, directly over the centre of the horizontal circle. Above it is attached to the transverse bar of the cloudy frame; below it connects with the cross formed by the base-frame bars. Above and below are axis pivots on which it can revolve. Inside is placed a stretcher, in the centre of which is an aperture, by which to attach the observation index bar, by the elevation or depression of which the altitude of the sun, moon, stars and planets may be noted in degrees and minutes.

"While the Revolving Meridian Circle turns freely from east to west, the north and south respectively being elevated and depressed, the degrees and minutes of polar distance of the seven planets, the twenty-eight constellations and all the stars may be accurately obtained.

[1] Gaubil remarks:—"*Cocheou-king* examina et observa longtemps le mouvement de l'Etoile qu'on appelle aujourd'hui pôlaire. Il asseura qu'elle étoit éloignée du Pôle d'un peu plus de 3° Chinois." (*Observations Mathématiques*, tom. II, p. 113).

"The equatorial circle, rotating in correspondence with the determinant stars of the twenty-eight zodiacal constellations, turns the boundary index bar till the two threads coincide; and thus the right ascension of the sun, moon, five planets and stars, in degrees of the respective zodiacal constellations, may be accurately obtained.

"On the diurnal circle, turn the boundary index bar, till the two threads coincide with the sun. Immediately below the thread the hour and division indicate the time of day. At night the stars are used for the same purpose.

"By these contrivances the obscurities of the *luminous longitude*, the *occult latitude*,[1] and the cloudy standards, incident to the old instruments when observing the rising and setting of the sun, moon and five planets, are avoided.

"The 渾象 *Hwan-seang*, "Celestial Sphere" (C), is made round like a ball, six feet in diameter, the degrees and minutes of the sphere being marked both longitudinally and latitudinally. The equator is in the centre, equidistant from the two poles, in each case a quarter of the circumference. The ecliptic is elevated above and depressed below the equator, in each case barely 24 degrees.[2] The elevations and depressions of the moon in its orbit being variable a bamboo hoop divided into degrees equally throughout is used to verify the intersections with the ecliptic, and moved from time to time accordingly. By observations first taken by the Compendium Instrument the right ascension and polar distance is ascertained, and according to these numbers the hoop being placed on the globe the proximity and angle of the moon's orbit with the ecliptic and equator is very obvious and easily determined when the theory of the movement is developed by calculation. This globe is placed on a square box, the north and south poles being respectively above and below the surface full forty degrees, half of the globe being visible and half concealed. There are toothed wheels set in motion by machinery concealed within the box for turning the globe."

Such is a detailed and very accurate description of one at least of the two remaining Mongol instruments now in the Peking Obser-

[1] I cannot explain these two terms.

[2] Gaubil says:—"*Cheou-king* après avoir fait beaucoup d'observations des Solstices, asseura qu'au Solstice d'Hyver le Soleil est éloigné de 115° 21′ 73″ du Pôle Boréal, de 67° 41′ 13″ au Solstice d'Eté. La différence de ces deux distances, est, dit *Cheou-king*, la distance de deux tropiques 47° 80′ 60″, la moitié est 23° 90′ 30″. C'est selon *Cheou-king* la plus grande déclinaison du ☉. *Remarque.*—Reduisez à nos degrés, c'est 23° 33′ 40″ & 17 a 18‴ P. G. (*Observations Mathématiques*, etc., tom. II, p. 113.)

vatory. Without the photograph it would have been extremely difficult if not impossible to have given an intelligible version. Now I trust it is tolerably clear: but lest the translation should be found defective in the matter of technical phraseology I give a copy of the original text from the *Yuen she*,[1] to enable scholars to improve upon my shortcomings. It will be seen, I think, that this instrument combines two or three of those mentioned as separate inventions in Ko Show-king's memoir.

The *Yuen she* gives no actual description of the other instrument, the Armillary Sphere; but we gather from the memoir that it was the same in theory as the globe above described; differing from it in that it was an open skeleton frame instead of a complete globe.

From the memoir we learn that Ko Show-king was appointed to his astronomical duties in 1276, but he had doubtless been intent on these inventions for many years before. A native author above quoted tells us that these instruments were placed on the observatory in 1279.

There they remained apparently throughout the whole of the Ming dynasty. When the Jesuit Matteo Ricci visited Peking in the beginning of the 17th century he saw them and spoke of them as counterparts of some he saw at Nanking, of which he has given a brief description, from which I borrow the portion referring to the two instruments before us and two others as given in Col. Yule's translation:[2]—"First we inspected a great globe (C), graduated with meridians and parallels; we estimated that three men would hardly be able to embrace its girth."[3].....

"A second instrument was a great sphere (A), not less in diameter than that measure of the outstretched arms which is commonly called a geometric pace. It had a horizon and poles; instead of circles it was provided with certain double hoops (*armillæ*), the void space between the pair serving the purpose of the circles of our spheres. All these were divided into 365 degrees and some odd minutes. There was no globe to represent the earth in the centre, but there was a certain tube, bored like a gun-barrel, which could readily be turned about and fixed to any azimuth or any altitude so as to observe any particular star through the tube, just as we do with our vane-

[1] See Appendix I.
[2] *The Book of Ser Marco Polo*, sec[illegible]tion, vol. II. pp. 547, 548.
[3] This is doubtless the "Celestial [illegible]e" (C), described above.

sights;—not at all a despicable device!... The third machine was a gnomon (E), the height of which was twice the diameter of the former instrument, erected on a very large and long slab of marble, on the northern side of the terrace. The stone slab had a channel cut round the margin, to be filled with water in order to determine whether the slab was level or not, and the style was set vertical as in hour-dials. We may suppose this gnomon to have been erected that by its aid the shadow at the solstices and equinoxes might be precisely noted, for in that view both the slab and the style were graduated. The fourth and last instrument, and the largest of all, was one consisting as it were of 3 or 4 huge astrolabes in juxtaposition (B); each of them having a diameter of such a geometrical pace as I have specified. The fiducial line, or *Alhidada*, as it is called, was not lacking, nor yet the *Dioptra*. Of these astrolabes, one having a tilted position in the direction of the south, represented the equator; a second, which stood crosswise on the first, in a north and south plane, the father took for a meridian; but it could be turned round on its axis; a third stood in the meridian plane with its axis perpendicular, and seemed to stand for a vertical circle; but this also could be turned round so as to show any vertical whatever. Moreover all these were graduated and the degrees marked by prominent studs of iron, so that in the night the graduation could be read by the touch without a light. 'All this compound' astrolabe instrument was erected on a level marble platform with channels round it for levelling. On each of these instruments explanations of everything were given in Chinese characters; and there were also engraved the 24 zodiacal constellations which answer to our 12 signs, 2 to each. There was, however, one error common to all the instruments, viz. that, in all, the elevation of the pole was assumed to be 36°. Now there can be no question about the fact that the city of Nanking lies in lat. $32\frac{1}{4}°$; whence it would seem probable that these instruments were made for another locality and had been erected at Nanking, without reference to its position, by some one ill-versed in mathematical science.

"Some years afterwards Father Matteo saw similar instruments at Peking, or rather the same instruments, so exactly alike were they, insomuch that they had unquestionably been made by the same artist. And indeed it is known that they were cast at the period when the Tartars were dominant in China; and we may

without rashness conjecture that they were the work of some foreigner acquainted with our studies."

There can be no doubt that the account of the last of the four instruments here given is a sufficiently precise description of the large instrument now in Peking, of which the minute description is given in the *Yuen she*, and the photograph is here annexed. As Ricci was in Peking the year after he saw these antiquities at Nanking, and as he died in the northern capital in 1610, there is no reason to believe that those he saw at Peking were the same he had seen at Nanking. Indeed the fact that the Nanking instruments were made for the 36th degree of latitude is sufficiently conclusive on that point.

It has been a question how these instruments at Nanking should have been made for the 36th degree of latitude, while Nanking was 32½° and Peking about 40°. The first explanations of this puzzle I received in a hint from Col. Yule, who drew my attention to the fact that Yelu Chutsai had established a college for the Mongol youth at 平陽 Ping-yang in Shansi, which is actually in latitude 36° 6′. This fact is not mentioned in Remusat's Memoir of Yelu Chutsai;[1] nor is it noticed in the work from which Remusat translated,[2] but on turning up the memoir of that scholar and statesman in the *Yuen she* we find that in 1233, just after the capture of Peen-leang, the capital of the Kin, Yelu Chutsai established an institution for literary composition in Yen-king [3] and a college for classical studies at Ping-yang, which is said to have been the commencement of scholastic culture under the Mongols.[4] I do not find a specification of the several branches of study included in the Ping-yang curriculum; but nothing is more probable than that astronomy should receive due attention; for this appears to have been a speciality of Yelu Chutsai himself. When the latter accompanied Genghiz Khan in his expedition to Central Asia he occupied himself in the calculation of eclipses, and doubtless gained much information in his intercourse with the Persian astronomers. In 1220 he laid before the great conqueror his new system of chronography, entitled, the 西征庚午元歷 *Se ching kăng woo yuen leĭh*, "Western Expedition Chronography of the *Kăng-woo*

[1] *Nouveaux Mélanges Asiatiques*, tom. II, pp. 64—88.
[2] *Suh hung keen luh*, book XI, fol. 1—9.
[3] Now Peking.
[4] *Yuen she*, book CXLVI, fol. 5, 6.

epoch." This was received by Genghiz, but was never used officially.[1] We may well believe then that there was an observatory at Ping-yang as well as Peking.

Another fact bearing on this point is the record of the advent of Jamal eddin, a Persian astronomer in 1267. He is said to have presented a new scheme of chronography, termed the 萬年歷 *Wan nëën leïh*, "Ten Thousand Years Chronography," which for a short time superseded the old Kin system. Seven Persian astronomical instruments were also presented by him, of which a brief description has been preserved. The first described is an armillary sphere, of which the pole is said to be elevated 36 degrees, a strong presumption that it was made for the observatory at Ping-yang.[2] Yet it is curious that in the list of places whose latitude is given in the same volume Ping-yang is not named; the only place given with a latitude of 36 degrees being Ta-ming in the province of Chihli.[3] These numbers, however, seem to be given very roughly, for there is not a station given with a fraction under half degree; and it is presumable Ricci's numbers are to be taken with the same margin. Marco Polo makes no mention of the city of Ta-ming, nor so far as I am aware does any other mediæval traveller.

The second instrument described by Ricci is obviously the "Skeleton Sphere" (A), named in Ko Show-king's memoir.[4]

Ricci's third instrument, the Gnomon, though apparently the same in principle and construction as the Lofty Gnomon (E) invented by Ko Show-king, was far inferior in dimensions, as may be seen by the following description of the latter, translated from the *Yuen she*.[5]

圭表 *Kwei Peaou*. "The Gnomon."

"The Gnomon platform is made of stone 128 feet long, 4 feet 5 inches wide and 1 foot 4 inches thick. The basement is 2 feet 6 inches high. Round reservoirs are excavated at the north, and

[1] *Yuen she*, book LII, fol. 1.-6) Ibid.
[2] See *Yuen she*, book XLVIII, fol. 10.
[3] *Yuen she*, XLVIII, fol 13.
[4] Gaubil remarks:—"On vante beaucoup un instrument dont se servoit Cheou-king; on n'en dit autre chose, sinon qu'il y avoit un Tube et deux fils; on ajoûte, qu'avec cet instrument il savoit jusqu'aux minutes, la mutuelle distance des Planètes, des Etoiles et de la Lune." (*Observations Mathématiques, Astronomiques*, etc., tome II, p. 115.) Does this refer to Ricci's sphere with the gun-barrel tube, and two fiducial wires? I rather incline to think it is the Equatorial circle of the Compendium Instrument that is meant, with the two triangle hypothenuse threads and the double sight-vane index.
[5] Book XLVIII, ff. 8, 9. For the original text see Appendix II.

south ends, each 1 foot 5 inches diameter and 2 inches deep. From one foot north of the style where the line descends straight from the beam,—for a hundred and twenty feet, a central strip of four inches wide is marked off, one inch on each side of which is divided into feet, inches and lines, extending to the north end. One inch from the edge on both sides are water-channels, an inch deep, connecting with the reservoirs at the two ends, for the purpose of levelling.

"The style is made 50 feet long, 2 feet 4 inches wide, and 1 foot 2 inches thick, and is fixed in the stone basement, at the south-end of the platform. It is inserted to a depth of 14 feet in the earth and the stone basement, above which it rises to a height of 36 feet.

"At the top on the two edges are two dragons, half their bodies attached to the style, sustaining a cross-beam. From the centre of the beam to the head of the style is 4 feet, and from the same point to the platform is forty feet. The beam is six feet long, and three inches in diameter, and there is a water-channel on the top for the purpose of levelling. At the two ends and in the centre are transverse holes, $\frac{1}{5}$ inch in diameter. In these holes are inserted iron rods five inches long; on these rods are strings fastened in the centre, with weights attached to them, to ascertain the correct position and prevent lateral deflection.

"When the style is short, the division into inches on the dial face is sufficiently minute, and the greater part of the small divisions below feet and inches are difficult to determine. When the style is long, the inch divisions are correspondingly longer; but the inconvenience then is that the shadow is light and ill-defined, making it difficult to get the exact line. In former times, observers sought to ascertain the real point by taking the centre of the light circle; for which purpose some used an observation tube, some set up a small style, and some had a wooden circle; all devices for catching the sun's reflexion from the head of the style on the dial face. Now the style is made of bronze, 36 feet high; the head being clasped by two dragons, bearing a cross beam, from which to the dial face is forty feet,[1] being equivalent to five styles of

[1] (Gaubil, speaking of the innovations of Ko Show-king, remarks:—"Il se servit de Gnomons de 40 pieds." (Observations Mathématiques, etc., tom II, p. 106).

8 feet each, and the dial and style are graduated in feet and inches. The inch of former usage is only equivalent to $\frac{1}{10}$ inch of the present scale, and the minuter subdivisions are easily determined."

The preceding observations are tolerably conclusive as to the Mongol instruments having been still in Peking in Ricci's time Sixty years later we again hear of them. Ricci had gone to his fathers; the venerable Schall had succumbed under persecution, and was succeeded as chief of the Board of Mathematics by Ferdinand Verbiest. The latter had come triumphantly through a scientific ordeal, and European astronomy was in the ascendant at the Chinese court, while the missionary sought by means of his power and influence to promote the Christian cause among the Chinese. I quote here a passage from the biography of this Father, referring to the period about 1670.

"Par ses experiences, le P. Verbiest etait parvenu à les convaincre, qu'en astronomie, les Europeens avaient des principes plus sûrs et des machines plus perfectionnées que les Chinois. Ce pas était immense.

"Les Mandarins des tribunaux des mathématiques, envoyés à l'observatoire, pour vérifier les calculs du père Verbiest, s'etaient pleinement convaincus de l'imperfection des machines astronomiques de l'observatoire; et la confiance qu'ils avaient dans les talents du missionaire leur suggéra l'idée de s'adresser a l'Empereur pour le prier de donner l'ordre au P. Verbiest de fondre de nouveaux instruments pour l'observatoire d'après les principes d'Europe. Cam-Hy leur accorda cette demande et par un diplôme rendu publique, il chargea Verbiest de cette confection."[1]

Here then was the sentence passed upon the old instruments of Ko Show-king, which were doomed to give way to the productions of modern science. Verbiest was occupied four years on his task, which he accomplished at an expense of 19,000 dollars. As far as I can make out, the European account tallies with the native work above quoted, as making the date of the displacement of the old by the new about the year 1673.

Father Le Compte, who was in Peking about 1688, is disposed to treat the whole affair somewhat superciliously. He is indignant at what had been written about them in Europe. In a letter to the

[1] *Notice Biographique sur le Père Ferdinand Verbiest*, (仁 德南) *Missionnaire à la Chine*, par l'Abbé C. Carton. Bruges, 1839. pp. 26, 27.

Cardinal of Furstemberg he writes:—"Be pleased, *My Lord*, to read what one of our ablest Mathematicians, has upon their [Travellers] Report spoken of it [the observatory]. *Nothing in* Europe *is to be compared to it, whether for the Magnificency of the Place, or the Bigness of those vast Brazen Machines, which having been during these Seven hundred years, exposed on the Platforms of those large Towers, are still as fair and entire as if they were but new molten. The Divisions of those Instruments are most exact, the Disposition most proper for their Design, and the whole work performed with an inimitable neatness.*"[1]

Full of these thoughts he says, he visited the observatory, which he describes as a square tower, such as were formerly used in Europe, to fortify the city walls; and adds:—"Upon this Platform the *Chinese* Astronomers had placed their Instruments, which tho but few, took up the whole Room: But Father *Verbiest*, when he undertook the Survey and Management of the Mathematicks, having judged them very useless, persuaded the Emperor to pull 'em down, and put up new ones of his own contriving. These old Instruments were still in the Hall near the Tower, buried in Dust and Oblivion. We saw them, but thro' a Window close set with Iron Bars. They appeared to us large, well cast, and of a shape not much unlike our Astronomical Rings."[2] Again he says:—"This Observatory, of little worth, as to its ancient Machines, and less as to its Situation and Building, is now enriched with several Brazen Instruments which Father *Verbiest* has set up in it."[3]

Father Gaubil, whose opinions on the Mongol instruments would have been interesting and valuable, was unable to get a sight of them. He remarks:—"*Co-cheou-king* ayant examiné les instruments des *Song* et des *Kin*, les trouva défectueux de 4 et 5 degrés, il en fit de nouveaux qui passoient alors pour être du premier ordre, Sphères, Gnomons, Armilles, Globes, Quarts de cercle, Boussoles. La plupart de ces instruments subsistent encore; mais on ne permet pas de les voir, ils sont dans une salle fermée."[4]

I can get no information as to when the present two instruments were removed from their obscurity, and placed in their present position.

[1] *Memoirs and Observations Topographical*, etc. London, 1697. p. 64.
[2] *Memoirs and Observations Topographical*, etc. London, 1697. p. 65.
[3] *Ibid.* p. 66.
[4] *Observations Mathématiques*, etc. Paris, 1732, tom. II, p. 108.

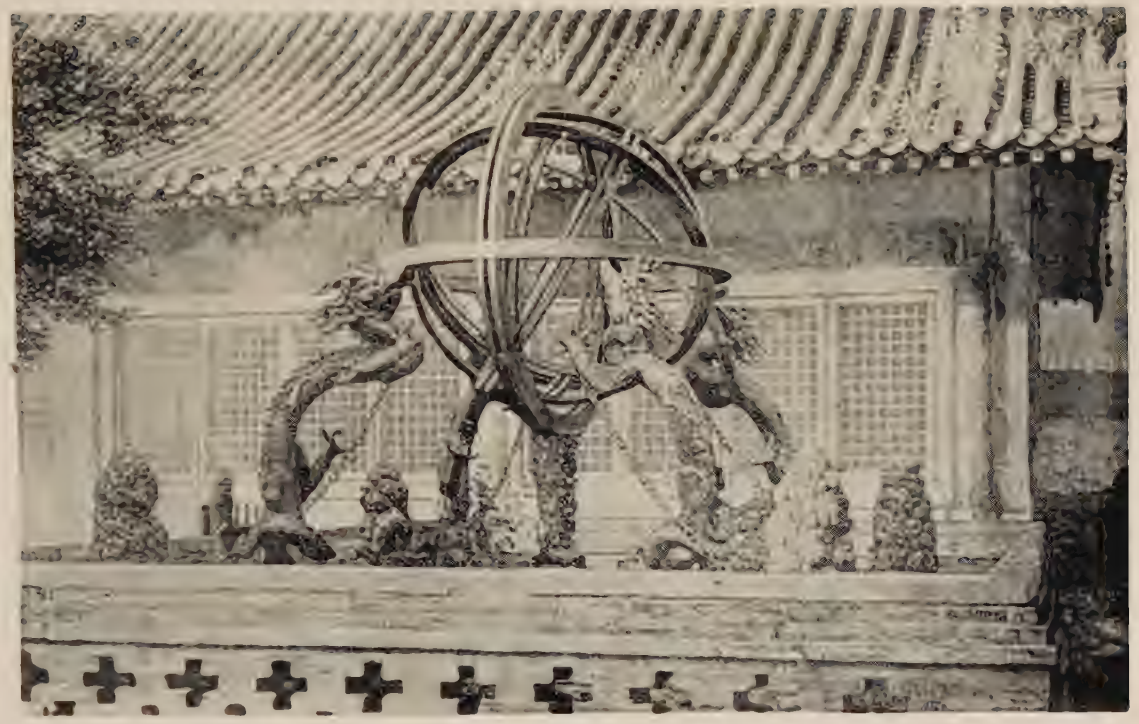
A beautiful photograph of the Armillary Sphere has recently been published, by Mr. Thomson, in the 4th volume of his *Illustrations of China and its People.*[1]

A lithographic reduction of the same plate forms the frontispiece to the second volume of the second edition of Col. Yule's Marco Polo. These pictorial representations will doubtless draw more attention to these curious Mongol relics.

The annexed photographs are by Mr. W. Saunders, an artist established in Shanghai.

Shanghai, 12 Aug., 1876. A. WYLIE.

[1] London, 1873—74



ARMILLARY SPHERE (A).

COMPENDIUM INSTRUMENT (B).

APPENDIX I.

Description of the Compendium Instrument, &c.

Extracted from the 元史 *Yuen-she*, book xlviii, ff. 2—5.

簡儀

簡儀之制四方爲趺縱一丈八尺三分云一以爲廣趺面上廣六寸下廣八寸厚如上廣中布橫較三縱較三南二北抵南較北一南抵中較趺面四周爲水渠深一寸廣扣五分四隅爲礎出趺面內外各二寸繞礎爲渠深廣皆一寸與四周渠相灌通又爲礎於邸西位廣加四維長加廣三之二水渠亦如之北極雲架柱二徑四寸長一丈二尺八寸下爲鼇雲植於乾艮二隅礎上左右內向其勢斜准赤道合貫上規規環徑二尺四寸廣一寸五分厚倍之中爲距相交爲斜十字廣厚如規中心爲竅上廣五分方一寸有半下二寸

五分方一寸以受北極樞軸自雲架柱斜上去跌面七尺二寸爲橫較自較心上至竅心六尺八寸又爲龍柱二植於卯酉礎中分之北皆飾以龍下爲山形北向斜植以柱北架南極雲架柱二植於卯酉礎中分之南廣厚形制一如北架斜向坤巽二隅相交爲十字其上與百刻環邊齊在辰巳未申之間南頫之勢準赤道各長一丈一尺五寸自跌面斜上三尺八寸爲橫較以承百刻環下邊又爲龍柱二植於坤巽二隅礎上北向斜柱其端形制一如北柱四游雙環徑六尺廣二寸厚一寸下間相離一寸相連於子午卯酉當子午爲圜竅以受南北極樞軸兩面皆列周天度分起南極抵北極餘分附於北極去南北樞竅兩旁四寸各爲直距廣厚如環距中心各爲橫關東西與兩距相連廣厚亦如之關中心相連厚三寸爲竅方八分以受窺衡樞軸窺衡長五尺九寸四分廣厚皆如環中腰爲圜竅徑五分以受樞軸衡兩端爲圭首以取中縮去圭首五分各爲側立橫耳高二寸二分廣如衡面厚三分中爲圜竅徑六分其中心上下一線界之以知虎分百刻環徑六尺四寸

面廣二寸周布十二時百刻每刻作三十六分厚二寸自半已上廣三寸又爲十字距皆所以承赤道環也百刻環內廣面臥施圜軸四使赤道環旋轉無澁滯之患其環陷入南極架一寸仍釘之赤道環徑廣厚皆如四游環面細刻列舍周天虎分中爲十字距廣三寸中空一寸厚一寸當心爲竅竅徑一寸以受南極樞軸界衡二各長五尺九寸四分廣三寸衡首斜剉五分刻虎分以對環面中腰爲竅重置赤道環南極樞軸其上衡兩端自長竅外邊至衡首底厚倍之取二衡運轉皆着環面而無低昂之失耳易得度分也二極樞軸皆以鋼鐵爲之長六寸半爲本半爲軸本之分寸一如上規距心適取能容軸徑一寸北極軸中心爲孔孔底橫穿通兩旁中出一線曲其本出橫孔兩旁結之孔中線留三分亦結之上下各穿一線貫界衡兩端中心爲孔下洞衡底順衡中心爲渠以受線直入內界長竅中至衡中腰復爲孔自衡底上出結之定極環半寸厚倍之皆勢穹窿中徑六度度約一寸許極星去不動處三度僅容轉周中爲斜十字距廣厚如環連於上規環距中心爲

孔徑五釐下至北極軸心六寸五分又置銅枚連於南極雲架之十字方二寸厚五分北面剜其中心存一釐以爲厚中爲圜孔徑一分孔心下至南極軸心亦六寸五分又爲環二其一陰緯環面刻方位取趺面縱橫較北十字爲中心臥置之其一日立運環面刻度分施於北極雲架柱下當臥環中心上屬架之橫輝下抵趺輝之十字上下各施樞軸令可旋轉中爲置距當心爲竅以施竅衡令可俯仰用窺日月星辰出地度分右四游環東西運轉南北低昂凡七政列舍中外官去極度分皆測之赤道環旋轉於列舍距星相當卽轉界衡使兩線相對凡日月五星中外官人宿度分皆測之百刻環轉界衡令兩線與日月相對其下直時刻則晝刻也夜則以星定之比舊儀測日月五星出沒而無陽經陰緯雲柱之映其渾象之制圜如彈凡徑六尺縱橫各畫周天度分赤道居中去二極各周天四之一黃道出入赤道內外各二十四度弱月行白道出入不常用竹篾均分天度考驗黃道所交隨時遷徙先用簡儀測致久宿去極度數按於其上校驗出入黃赤二道遠近疎密

了然易辨仍參以算數爲準其象置於方匱之上南北極出入匱面各四十度太强半見半隱機運輪牙隱於匱中

APPENDIX II.

Description of the Gnomon.

Extracted from the *Yuen-shé*, book xlviii, ff. 8, 9.

圭表

圭表以石爲之長一百二十八尺廣四尺五寸厚一尺四寸座高二尺六寸南北兩端爲池圓徑一尺五寸深二寸自表北一尺與表梁中心上下相直外一百二十尺中心廣四寸兩旁各一寸畫爲尺寸分以達北端兩旁相去一寸爲水渠深廣各一寸與南北兩池相灌通以取平表長五十尺廣二尺四寸厚減廣之半植於圭之南端圭石座中久地及座中一丈四尺上高三十六尺其端兩旁爲二龍半身附表上擎橫梁自梁心至表頭四尺下屬圭面共爲四十尺梁長六尺徑三寸上爲水渠以取平兩端及中腰各爲橫竅徑

二分橫貫以鐵長五寸繫線合於中懸錘取正且防傾墜按表短則分寸短促尺寸之下所謂分秒太半少之數未易分別表長則分寸稍長所不便者景虛而淡難得實影前人欲就虛景之中考求眞實或設望筒或置小表或以木爲規皆取端日光下徹表面今以銅爲表高三十六尺端挾以二龍舉一橫梁下至圭面共四十尺是爲人尺之表五圭表刻爲尺寸舊一寸今中而爲五釐毫差易分別

ECLIPSES RECORDED IN CHINESE WORKS.

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
B.C. 2127	9	47		Much difference of opinion has existed as to the year.	A	4
776	10	28			B	
720	2	6			C	1
709	7	29		Total.	,,	2
695	10				,,	,,
676	3				,,	3
669	6	8			,,	,,
668	12	60			,,	,,
664	9	7			,,	,,
655	9	45			,,	5
648	3	7			,,	,,
645	5				,,	,,
636	2	60			,,	6
612	6	38			,,	,,

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
B.C. 601	7	1		Total.	C	7
599	4	53			,,	,,
592	6	40			,,	,,
575	6	3			,,	8
574	12	54			,,	,,
559	2	32			,,	9
558	8	54			,,	,,
553	10	53			,,	,,
552	9	47			,,	,,
,,	10	17			,,	,,
550	2	10			,,	,,
549	7	1		Total.	,,	,,
,,	8				,,	,,
546	12	12			,,	,,
535	4	41			,,	10
527	6	54			,,	,,
525	6	11			,,	,,
521	7	19			,,	,,
520	12	10			,,	,,

B.C.	518	5	32			C	10
	511	12	48			,,	,,
	505	3	48			,,	11
	498	11	3			,,	,,
	495	8	17			,,	,,
	481	5	57			,,	,,
	443					D	5
	435	6				Y	74
	410					,,	,,
	397					&	1
	392					,,	,,
	375					,,	,,
	369					,,	,,
	301					D	5
	248	4				Y	74
	247	4				D	5
	204	10	11	斗 20°	l. d.	E	27
	,,	11	40	虛 3°	l. d.	,,	,,
	198	6	32	張 13°	l. d. Total.	,,	,,
	188	1	38	危 13°		,,	,,
	,,	5	4	星	Last day but one of the month. Nearly total.	,,	,,
	185	6	28		l. d.	,,	,,
	181	1	26	室 9°	l. d. Total.	,,	,,
	178	11	40	女 1°	l. d.	,,	,,
	177	10	34	斗 23°	l. d.	,,	,,

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
B.C. 177	11	4	虛 8°	l. d.		
160	4	53	井 13°	l. d. The 4th section of the same work gives the 3rd day of cycle.	E	27
157	1	8			,,	,,
154	2	19	胃 2°	l. d. The 5th section of this work gives 49th day of cycle.	,,	,,
153	10	35		l. d.	,,	,,
150	11	27	虛 9°	l. d.	,,	5
149	12	51		l. d.	,,	,,
148	9	11		l. d.	,,	27
147	9	35	尾 9°	l. d. Almost total.	,,	,,
146	10	55			,,	,,
145	7			l. d. This is recorded by Gaubil.	,,	5
144	7	48	軫 7°	l. d.		
143	7	42	翼 17°	Last day but one of the month.	,,	27
139	2	23	奎 14°		,,	,,
138	9	13	尾 2°	l. d.	,,	,,
136	1	6			,,	,,
134	2	53		l. d.	,,	,,
,,	7	20	翼 3°	Last day but one of the month.	,,	,,
127	2	42	胃 3°	l. d.	,,	,,
					,,	,,

B.C.	127	3	12		l. d.		E	6
	123	11	50		l. d.		,,	27
	122	5	42	柳 6°	l. d.		,,	,,
	112	4	14	井 23°	l. d.		,,	,,
	107	6	46				,,	,,
	96	1	42		l. d.		,,	,,
	93	10	51	斗 19°	l. d.		,,	,,
	89	8	58	亢 2°	l. d.	Annular.	,,	,,
	84	11	29	斗 9°			,,	,,
	80	7	36	張 12°	l. d.	Almost total. The 8th section of this work gives 12th day of cycle, and total.	,,	,,
	69	12	60	室 15°	l. d.		,,	,,
	57	12	22	女 10°			,,	,,
	54	4	38	畢 19°			,,	,,
	42	3	59	柳 8°			,,	,,
	40	6	15	張 7°	l. d.		,,	,,
	34	6	9		l. d.	Annular.	,,	,,
	30	12	45				,,	,,
	28	4	36	井 6°	l. d.	Annular.	,,	,,
	26	8	52	房	l. d.		,,	,,
	25	3	50	昴			,,	,,
	24	2	44	胃	l. d.		,,	,,
	16	9	54		l. d.		,,	,,
	15	2	22		l. d.		,,	,,
	14	1	16		l. d.		,,	,,

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
B.C. 13	7	8		l. d.	E	27
12	1	36			,,	,,
2	1	38	室 10°	Annular.	,,	,,
1	3	29		l. d. The 11th section of the same work makes this the 4th month.	,,	,,
A.D. 1	5	54	井	l. d.	,,	,,
2	9	45		l. d. Total.	,,	,,
6	10	53			Y	74
14	3	9		l. d.	,,	,,
16	7	25		l. d.	,,	,,
25	1	7			A	285
26	1	1	危 8°		F	28
27	5	52	柳 14°	l. d.	,,	,,
28	5	52		l. d. Quoted in the commentary on F.	X	
29	9	3			Y	74
30	3			l. d. Quoted by Gaubil, from "L'histoire secrette des Han."		
,,	9	3	尾 8°	l. d.	F	28
31	3	60	畢 5°	l. d.	,,	,,
33	7	34		Quoted in the commentary on F.	X	

A.D.	35	6	50		Quoted in the commentary on F.	X	
	,,	12	48		Do. do.	,,	
	40	3	38	昴 7°	l. d.	F	28
	41	2	12	胃 9°	l. d.	,,	,,
	46	5	32	柳 7°	l. d.	,,	,,
	49	3	45	畢 15°	l. d.	,,	,,
	50	2	25		Total. Quoted in the commentary on F.	X	
	53	2	54	壁 5°		F	28
	55	5	10	柳 5°	l. d.	,,	,,
	56	11	1	斗 20°	l. d.	,,	,,
	60	8	9	氐 2°	l. d.	,,	,,
	61	8	3		Between 1 and 3 p.m. Quoted in the commentary on F.	X	
	62	2	32		Invisible at the capital, but seen in the provinces. Com. on F.	,,	
	63	6	17		l. d. Not seen at Lo-yang the capital. Commentary on F.	,,	
	65	10	39	斗 11°	l. d. Total.	F	28
	,,	12			Quoted in the commentary on F.	X	
	70	8			Do. do.	,,	
	,,	10	41	尾 17°	l. d. The 2nd section of the same work gives the 29th day of cycle.	F	28
	73	5	55	柳 15°	l. d.	,,	,,
	75	11	41	斗 21°	l. d.	,,	,,
	80	2	17	壁 8°		,,	,,
	81	6	8	翼 6°	l. d.	,,	,,
	84	8	32	氐 4°	l. d.	,,	,,
	87	8	32		l. d.	,,	3

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A D. 90	2	19	奎 8°			
91	8	32		l. d.	F	28
92	6	35	星 2°		Y	74
95	4	48	觜		F	28
100	7	48	翼 8°		,,	,,
103	4	1	井 22°	l. d.	,,	,,
107	3	10	胃 2°	2nd day of the month.	,,	,,
109	3			Quoted in the commentary on F. Section 28.	,,	,,
111	1	17	虛 8°		X	
113	4	33	井 1°	l. d.	F	28
114	3	19			,,	,,
,,	10	25	尾 10°		,,	5
115	9	19	心 4°	l. d.	,,	28
116	3	48	婁 5°	2nd day of month. Y makes this the 2nd month.	,,	,,
117	2	42	奎 9°		,,	,,
118	8	33	翼 18°		,,	,,
119	12	35	女 11°	Nearly total; stars all visible.	,,	,,
120	7	22	張 15°		,,	,,
124	9	57	氐 15°	l. d.	,,	,,
					,,	,,

A.D. 125	3	55	胃 12°		F	28
127	7	11	翼 9°		,,	,,
135	In7	24	角 5°	& and Y both make this the 8th month.	,,	,,
138	12	35	女 11°		,,	,,
140	5	26	井 33°	l. d.	,,	,,
141	9	48	尾 11°	l. d.	,,	,,
147	1	48	室 3°		,,	,,
149	4	4	井 23°	l. d.	,,	,,
152	7	17	翼 4°	2nd day of month.	,,	,,
154	9	4	角 5°		,,	,,
157	In4	17	星 2°	l. d.	,,	,,
158	5	11	柳 7°	l. d.	,,	,,
165	1	33	室 13°	l. d.	,,	,,
166	1	28	室 3°	The 7th section of this work gives the 48th day of the cycle.	,,	,,
167	5	49	鬼 1°		,,	,,
168	5	44			,,	,,
,,	10	41		l. d.	,,	,,
169	10	35		l. d. The 8th section of this work gives the 37th day of cycle.	,,	,,
170	3	3		l. d.	,,	,,
171	3	58			,,	,,
173	12	10	虛 2°	l. d.	,,	,,
177	10	50			,,	,,
178	2	48			,,	,,
,,	10	13	箕 4°	l. d.	,,	,,
179	4	11			,,	,,

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 181	9	27	角 6°			
186	5	29		l. d.	F	28
189	4	43			,,	,,
193	1	51	室 4°		,,	,,
194	6	42		l. d.	,,	,,
200	9	7			,,	,,
201	3	4			,,	,,
,,	10	20			,,	9
208	10	20	尾 12°		,,	28
210	2	42			,,	,,
211	6	27		l. d.	,,	,,
212	6	27		l. d.	,,	9
216	5	36			,,	28
219	2	49		l. d.	,,	,,
220	2	44			,,	,,
221	6	5		l. d. 1 to 3 p.m. (U)	,,	,,
222	1	3			G	2
,,	11	57		l. d. 3 to 5 p.m. (U)	,,	,,
224	11	45		l. d.	,,	,,

A.D. 231	11	35	l. d.	G	3
232	1	5		H	12
233	In5	27		,,	,,
240	7	45		,,	,,
242	4	35		,,	,,
243	5	14	Total. (G)	,,	,,
244	4	53		,,	,,
245	4	49		,,	,,
,,	10	45		,,	,,
247	2	7		,,	,,
248	1	32		,,	,,
249	2	56		,,	,,
259	7	25		,,	,,
260	1	22		,,	,,
261	5	44		,,	,,
262	11	36		,,	,,
266	7	43	l. d. & makes this the 6th month.	,,	,,
,,	10	43		,,	,,
271	10	14		,,	,,
272	10	8	Y makes this the 44th day of cycle.	,,	,,
273	4	5		,,	,,
,,	7	34		,,	,,
274	1	32		,,	,,
,,	3	60		,,	,,
275	7	21	l. d.	,,	,,

SOLAR ECLIPSES.

Year.	Month	Day of cycle.	R. A.		Book.	Section.
A.D. 277	1	13			H	12
278	1	7			,,	,,
283	3	38			,,	,,
285	8	23			Y	74
286	1	51			H	12
287	1	45			,,	,,
288	1	9			,,	,,
,,	6	37			,,	,,
299	11	1			,,	,,
300	1	16		Y makes this the 28th day of cycle.	,,	,,
,,	4	28			,,	,,
301	Int3	23			,,	,,
306	1	25			,,	,,
,,	7	22			,,	,,
,,	12	19		Y makes this the 11th month.	,,	,,
307	11	45			,,	,,
308	2	13			,,	,,
312	2	49			,,	,,
316	6	54			,,	,,

A.D. 316	12	21			H	12
317	5	13			,,	,,
,,	11	13			,,	,,
318	4	14			,,	,,
325	11	30	斗	7 a.m.	,,	,,
327	5	21	井		,,	,,
331	3	59			,,	,,
334	10	32			,,	,,
335	10	32			,,	,,
341	2	1		Ȳ makes this the 31st day of cycle.	,,	,,
342	1	32		Y makes this the 56th day of cycle.	,,	,,
346	4	46			,,	,,
351	1	34			,,	,,
352	1	28			,,	,,
356	10	30	尾		,,	,,
360	8	38	角	Almost total. Y makes it total.	,,	,,
362	3	51			,,	,,
,,	12	55			,,	,,
368	3	54			,,	,,
370	7	10			,,	,,
375	10	10			,,	,,
376	11				&	21
379	In	46			H	12
381	6	37			,,	,,
384	10	48			,,	,,

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 392	5	4				
395	3	17			H	12
400	6	17			,,	,,
403	4	30			,,	,,
407	7	35			,,	,,
414	9	54			,,	,,
415	7	48		l. d.	,,	,,
417	1	11			,,	,,
419	11	24			,,	,,
424	1	30			,,	,,
,,	2	16			J	4
427	6	40			O	1
428	11	32			J	5
429	5	29			K	151
,,	11	26		Stars were seen in the day time. (Y)	J	5
435	1	56		P makes this the 32nd day of cycle.	,,	,,
438	11	4			K	151
440	4	55			,,	,,
442	7	11		l. d. K makes this the 8th month.	J	5
					,,	,,

A.D.	445	6	25		K	151
	446	6	20		I	5
	449	4	33		K	151
	,,	6	27		,,	,,
	453	7	38		I	6
	454	7	33		,,	,,
	460	9	57		K	151
	461	9	51		I	6
	462	2	49		K	151
	467	10	16	P makes this the 36th day of the cycle.	,,	,,
	468	4	13		,,	,,
	,,	10	10		I	8
	469	4		Quoted by Gaubil from the Wei History.		
	,,	10	4	K makes this the 34th day of cycle.	I	8
	471	12	40		K	151
	473	12	40		I	9
	474	1	10		K	151
	477	10	48		,,	,,
	478	2	22	l. d. O makes this the 3rd month and 26th day of cycle.	,,	,,
	,,	9	42		I	10
	479	3	40		,,	,,
	480	9	31		,,	,,
	481	7	57	O makes this the 56th day of cycle.	K	151
	483	12	42		,,	,,
	488	2	12	8 digits. P makes this the 48th day of cycle.	,,	,,

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 490	2	6		1 to 3 p.m. 1 dig. Intercepted by clouds. P makes this the 2nd month.	K	151
491	1	60		l. d.	,,	,,
493	6	17			,,	,,
494	5	11			,,	,,
,,	11	9			O	5
496	9	27		l. d.	K	151
500	1	38			,,	,,
,,	7	36			,,	,,
501	1	33			O	5
,,	7	30			K	151
502	7	54			,,	,,
506	3	3			O	6
508	8	49			K	151
509	8	43			,,	,,
511	12	59	牛 4°		,,	,,
512	5	56		l. d.	,,	,,
513	5	51		Invisible at Lo-yang, the metropolis, but seen at 恒州 Han-chow.	,,	,,
516	3	5		Total. (O)	,,	,,
519	1	18			,,	,,

A.D. 520	I	12	O makes this the 13th day of the cycle.	K	151
521	5	34	Reported visible at 夏州 Hea-chow.	,,	,,
522	5	29	Total. (O)	,,	,,
,,	11	26		,,	,,
523	11	20		,,	,,
525	10	46	Sun rose eclipsed 7 digits on the S. W. limb.	,,	,,
529	10	22		Y	74
531	6	36	Sun eclipsed on the S. W. limb. Reported from 定州 Ting-chow and 相州 Seang-chow.		
,,	10	58	Sun eclipsed on the S. W. limb.	,,	,,
532	10	58	This and the preceding are probably different records of same eclipse.	,,	,,
533	4	56	Beginning of eclipse, direct south.	K	151
534	4	50		,,	,,
538	1	38	P makes this the 58th of cycle. 11 a.m. to 1 p.m. (U)	,,	,,
,,	6	38		O	7
540	Iu5	14		K	151
547	1	36	Beginning of eclipse, S. W. 3 to 5 p.m. (U)	,,	,,
548	7	27	Beginning of eclipse, N. W.	,,	,,
559	5	53		J	2
561	4	13		M	5
,,	10	11		,,	,,
562	9	5		J	3
563	3	2		M	5
564	2	27		,,	,,
,,	8	24	Y makes this the 44th day of the cycle.	,,	,,

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A D. 565	7	18				
566	1	16			M	5
567	1	10			,,	,,
,,	11	35			,,	,,
568	11	29			,,	,,
570	10	18			,,	,,
571	4	15			,,	,,
572	3	40			,,	,,
,,	9	37			,,	,,
574	2	29			,,	,,
575	2	23			J	5
,,	12	48			M	6
576	6	45		5 to 7 a.m. (U)	,,	,,
577	11	36		l. d.	L	8
580	10	51			M	6
583		6			Y	74
,,		4		l. d. Z makes this the 1st day of 8th month.	N	1
584	1	1			,,	,,
585	1	55			J	6

A.D. 585	6		星 6°	l. d. 6 digits on N. W. limb. Beginning 0.30 p.m. Mid. 1.15 p.m. End 2.15 p.m.	N	17
586	10	14	斗 9°	l. d. 10 digits on W. limb. Beginning 7.30 a.m. Mid. 8.30 a.m. End 9.45 a.m.	,,	,,
587	5	12			,,	1
591	2	18		l. d.	,,	,,
592	7	9		l. d.	,,	,,
593	7	5		l. d.	,,	,,
594	7			About midday the sun was eclipsed 8 digits, when it disappeared among the clouds.	,,	17
601	2	52			,,	1
616	5	23		Total.	,,	,,
618	10	0	氐5°		Q	32
620	1			A calculation quoted by Gaubil		
,,	8			Do. do.		
621	8	23	翼 4°		Q	32
623	12	39	斗 19°		,,	,,
626	10	53	氐 7°		,,	,,
627	In3	50	胃 9°		,,	,,
,,	9	47	亢 5°		,,	,,
628	3	45	婁 11°		,,	,,
629	8	6	翼 5°		,,	,,
639	In1	4	室 4°		,,	,,
,,	7	1	張 14°		,,	,,
632	1	52	虛 9°		,,	,,

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 634	5	8	參 7°		Q	32
635	In4	3	畢 13°		,,	,,
637	3	23	奎 2°		,,	,,
638	In2	17	奎 9°		,,	,,
639	8	8	翼 14°		,,	,,
643	6	16	井 16°		,,	,,
644	10	38	房 3°		,,	,,
646	In3	30	胃 9°		,,	,,
648	8	46	翼 5°		,,	,,
660	6	7	柳 5°		,,	,,
661	4	31		l. d.	,,	3
,,	5	1	井 27°	l. d.	,,	32
665	In3	10	胃 9°		,,	,,
667	8	46	翼 6°		,,	,,
669	6	45	井 29°		,,	,,
670	6	39	井 18°		,,	,,
671	11	31	箕 9°		,,	,,
672	11	25	尾 10°		,,	,,
674	3	48	奎 13°		,,	,,

A.D.	680	11	9	尾	16°	10 a.m. (U)	Q	32
	681	10	3	尾	4°	9 to 10 a.m. (U)	,,	,,
	682	4	1	畢	5°		,,	,,
	,,	10	57	房	3°		,,	,,
	686	2	8	室	15°		,,	,,
	688	6	24	井	27°		,,	,,
	691	4	39	鬼	7°	5.30 a.m. (U)	,,	,,
	692	4	33	胃	11°		,,	,,
	693	9	24	角	10°		,,	,,
	694	9	19	軫	18°		,,	,,
	695	2	22	室	5°		,,	,,
	700	5	46	畢	15°	3 to 4 p.m. (U)	,,	,,
	702	9	2	角		Almost total. 3.45 p.m. (U)	,,	,,
	703	3	59	翼	9°		,,	,,
	,,	9	27	鬼	7°		,,	,,
	707	6	4	井	28°	Noon. (U)	,,	,,
	,,	12	2	斗	21°		,,	,,
	712	9	4	角	10°		,,	,,
	715	7	17	張	4°		,,	,,
	719	5	26	畢	15°		,,	,,
	721	9	6	軫	15°	Noon. (U)	,,	,,
	724	In12	53	虛			,,	,,
	729	10	55	氐	9°	Annular.	,,	,,
	732	2	11	室	10°		,,	,,
	,,	8	8	翼	7°		,,	,,

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 733	7	2	張 15°			
734	12	37	斗 23°		Q	32
735	In11	19	斗 11°		,,	,,
737	9	43	亢 9°		,,	,,
738	9	33			,,	,,
740	3	24	畢 3°		,,	5
742	7	40	張 5°		,,	32
746	5	49	畢 16°		,,	,,
754	6	2	井 19°	Almost total.	,,	,,
756	10	18	氐 10°	Total.	,,	,,
761	7	20	張 4°	Total. The large stars were all visible.	,,	,,
768	3	42	奎 11°		,,	,,
775	10	58	氐 11°		,,	,,
779	7	5	張 4°		,,	,,
,,	12	3	危 12°	l. d.	,,	,,
786	8	18	軫 8°		,,	,,
78	8	18			,,	,,
789	1	41	室 6°		,,	7
792	11	49	尾 6°		,,	32
					,,	,,

A.D.	796	8	56	翼	18°		Q	32
	801	5	59	井	10°		,,	,,
	808	7	18	星	3°		,,	,,
	815	8	36	翼	18°		,,	,,
	818	6	50	鬼	1°		,,	,,
	822	4	58	胃	13°		,,	,,
	823	9	49	角	12°		,,	,,
	834	2	19	奎	1°		,,	,,
	836	1	38	虛	3°		,,	,,
	843	2	57	壁	1°		,,	,,
	844	2	51	室	7°		,,	,,
	845	7	43	張	7°		,,	,,
	846	12	5	斗	14°		,,	,,
	848	5	56	參	9°		,,	,,
	854	1	23	危	1°		,,	,,
	863	7	28	張	17°		,,	,,
	876	9	12	軫	14°		,,	,,
	877	4	9	畢	3°		,,	,,
	879	4	57	胃	8°	Total.	,,	,,
	888	3	35	胃	1°		,,	,,
	904	10	28	心	2°		,,	,,
	906	4	20	胃	12°		,,	,,
	909	2					&	54
	911	1	23				R	59
	921	6	52				S	2

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 923	10	8			R	59
925	4	60			,,	,,
926	8	22			,,	,,
927	8	16			,,	,,
928	2	14			,,	,,
930	6	30			,,	,,
931	11	21			,,	,,
937	1	52			,,	,,
938	1	45			A	283
939	7	37			R	59
940	11	14			,,	,,
942	4	51			A	283
943	4	45			R	59
944	3	25			,,	,,
,,	9	7			,,	,,
945	8	1			,,	,,
946	2	59			,,	,,
948	6	15			,,	,,
949	6	10			,,	,,

A.D.	950	11	1	R	59
	952	4	23	„	„
	955	2	37	S	6
	956	12	10	R	59
	958	5		&	„
	960	5	36	A	283
	961	4	30	S	6
	965	2	39	„	7
	967	6	55	A	283
	968	12	46	„	„
	970	4	8	„	„
	971	10	60	„	„
	972	9	54	„	„
	974	2	17	„	„
	975	7	8	„	„
	977	11	24	„	„
	979	9	17	D	86
	981	9	32	A	283
	982	3	30	„	„
	„	11	55	D	86
	983	2	25	A	283
	985	12	37	„	„
	986	6	35	„	„
	991	In2	8	S	13
	992	2	2	„	„

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 903	2	56				
„	8	53			A	283
994	7	48			D	87
„	12	15		Obscured by clouds at Hang-chow. (D)	S	13
997	5	1			„	„
998	5	55			„	„
„	10	23			A	283
999	9	17			„	„
1000	3	15			„	„
1002	7	31			„	„
1004	12	17		Total.	S	14
1006	5	39		Obscured by clouds at Hang-chow.	„	„
1007	5	33			A	283
„	10	31		Obscured by clouds at Hang-chow.	„	„
1009	3	53		Obscured by rain at Hang-chow.	„	„
1012	8	33			„	„
1013	12	55			„	„
1014	12	50		This occurred in the night time. It was predicted for daylight.	„	„
1015	6	46			„	„
					„	„

A.D. 1019	3	55		A	283
1020	7	47		S	16
1021	7	11	It was calculated for total; but only extended to 4 digits.	A	283
1022	7	1	Almost total.	,,	,,
1024	5	24	This was not observed according to prediction.	,,	,,
1026	10	11		,,	,,
1028	3	33		,,	,,
1029	8	24		,,	,,
1033	6	31		,,	,,
1036	4	46	$2\frac{1}{2}$ digits. It occurred before sunrise, and was invisible at the capital.	,,	,,
1038	1	53	6 digits. Ended about $\frac{1}{4}$ past 3 p.m.	,,	,,
1040	1	53		,,	,,
1042	6	9	5 digits. About 6.30 p.m. it became invisible in the haze.	,,	,,
1043	5	4		,,	,,
1044	11	45	This occurred at night. It was predicted for daylight.	,,	,,
1045	4	24	Obscured by clouds at Hang-chow.	,,	,,
1046	3	18	$4\frac{1}{4}$ digits. Ended about 3.45 p.m.	,,	,,
1049	1	31	1 digit. (A) Noon. (U)	S	20
1052	11	39	2 digits barely. Ended about 2.15 p.m.	A	283
1053	10	33	About 0.15 p.m. Eclipsed $4\frac{1}{2}$ digits. (A) 1.15 p.m. (U)	S	20
1054	4	31	Eclipsed more than 9 digits, on the S. W limb. Middle about 4.15 p.m. Rain and thunder at Hang-chow.	A	283
1056	8	47	2 digits.	,,	,,
1058	8	36	$3\frac{1}{2}$ digits.	,,	,,
1059	1	33	Eclipsed more than 3 digits. Ended about 1.45 p.m.	,,	,,

Year.	Month	Day of cycle.	R. A.		Book.	Section.
A.D. 1061	6	49		At 1 p.m it was eclipsed 4 digits at Hang-chow when it disappeared among the clouds.	S	21
1066	9	49		1.30 p.m. (U)	,,	22
1068	1	11			,,	,,
1069	7	2		7.45 a.m. (U)	,,	,,
1073	4	11		Obscured by clouds.	**D**	89
1075	8	27		Obscured by clouds. (**D**)	S	23
1078	6	40			**D**	89
1080	11	26		Obscured by clouds. (**D**) 10.30 a.m. (U)	S	24
1081	11	20			**D**	89
1082	4	49		Obscured by clouds.	,,	,,
1083	9	40			S	24
1087	7	47		Obscured by clouds.	**A**	283
1091	5	56			S	25
1094	3	9		2.30 p.m. (U)	,,	,,
1095	2			Recorded by Gaubil, as having occurred at night.		
1096	2	4			**A**	283
1097	6	20			**D**	90
1099	12	51		Total.	,,	,,

A.D. 1100	4	34		S	26
1101	4	28		D	90
1106	7	17	This was predicted, but not seen.	,,	,,
,,	12		Recorded by Gaubil, as predicted, but not seen.		
1107	11	49	1.30 to 3 p.m. (U)	D	91
1108	5	47		,,	,,
1110	9	3		,,	,,
1113	3	49		,,	,,
1115	7	5		,,	,,
1118	5	19		,,	,,
1119	4	13		,,	,,
1120	10	5		,,	,,
1122	2	27		S	29
1123	8	18	Obscured by clouds. (D)	T	2
1129	9	43		,,	3
1135	1	43	D makes this the 42nd day of cycle.	,,	,,
1137	2	30		D	93
1140	7	40		T	4
1143	12	20		,,	,,
1144	6	18		,,	,,
1145	6	12		,,	,,
1147	10	28		D	94
1148	4	25		T	4
1149	3	20		,,	,,
1154	5	50		,,	5

Year.	Month	Day of cycle	B. A		Book.	Section.
A.D. 1155	5	44		Obscured by clouds. (D)	T	5
1158	3	58		Obscured by clouds.	"	"
1160	7	14			D	94
"	8	43			T	5
1161	1	11			"	"
1162	1	[illegible]		3 to 4 p.m. (U)	"	6
1163	6	57			"	"
1164	6	51			"	"
1167	4	5			"	"
1169	8	21		Obscured by rain	"	"
1173	5	20			"	"
1174	11	21			"	7
1176	3	43		Obscured by clouds. (D)	"	"
1177	9	34		Obscured by clouds. (D)	"	"
1183	11	59		10.30 a.m. (U)	"	"
1188	8	1			"	8
1189	2	58			"	"
1195	3	23		11.30 a.m. (U)	"	9
1198	1	36		Obscured by clouds.	"	10
					"	20

A.D. 1199	1	30	Obscured by clouds.	A	283
1200	0	22		D	96
„	11	50		T	11
1202	5	41		„	„
1203	4	36		D	96
1206	2	49	11.15 a.m. (U)	T	20
1209	12	58		„	„
1210	6	54		D	96
„	12	58		T	13
1211	11	22		D	96
1214	9	59	Large stars all visible	T	20
1216	2	21	3 p.m. (U)	„	14
„	In 7	19		„	„
1217	7	13		„	15
1218	7	7		„	„
1221	5	21		„	16
1223	9	37		„	„
1227	6	45		D	97
1228	6	39		„	„
„	12	37		T	17
1233	9	39		D	97
1235	2	1	Calculation not verified.	„	„
1237	12	15		„	„
1242	9	17		„	„
1243	3	14	9.30 a.m. (U)	„	„

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 1245	7	30				
1246	1	28			D	97
1249	4	39			,,	,,
1252	2	52			,,	,,
1253	2	46			,,	,,
1260	3	5		2.30 p.m. (U)	,,	,,
1261	3	59			,,	,,
1265	1	8			U	48
1267	5	24			,,	6
1268	10	15			,,	,,
1270	3	37			,,	,,
1271	8	29			,,	7
1272	8	23			,,	,,
1275	6	37			,,	,,
1277	10	53		Noon. (U)	,,	8
1282	6	26			,,	9
,,	7	55			,,	12
1287	10	55			,,	,,
1289	3	17			,,	14
					,,	48

| A.D. | | |

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 1342	10	36			U	40
1343	4	33			,,	41
1344	9	24			,,	,,
1345	9	19			,,	,,
1346	2	47			,,	,,
1347	1	41			,,	,,
1348	7	33			,,	,,
1349	11	55			,,	,,
1350	11	49			,,	42
1351	5	46			,,	,,
1352	4	40			,,	,,
1353	9	2			,,	,,
1354	3	40		The 48th section makes this the 60th day of cycle.	,,	43
1357	1	13			,,	,,
1358	6	5			,,	45
,,	11			This is recorded by Gaubil.	,,	48
,,	12	2			U	45
1360	5	24			,,	,,
1361	4	18			,,	48

A.D. 1364	4	31	Total.	E	10
„	8	29		U	46
1366	7	18		„	47
1367	6	43		„	„
„	12	40		„	„
1368	5	7		B	216
1369	5	31		V	2
1371	9	47		„	„
1373	3	40		„	„
1374	2	34		„	„
1375	7	56		„	„
1376	7	50		„	„
1377	12	42		„	„
1379	12	42		B	216
1381	10	49		V	2
1383	8	9		„	3
1386	12	20		„	„
1388	5	11		„	„
1389	9	3		„	„
1390	9	27		„	„
1391	3	25		„	„
1393	7	41		„	„
1397	5	49		„	„
1399	3	3		„	„
1406	6	56	Obscured by clouds.	„	4
				„	6

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A		Book.	Section.
A.D. 1407	10	18			B	216
1408	4	16			,,	,,
,,	10	12			,,	,,
1409	9	[illegible]			V	6
1413	1	18			,,	,,
1414	1	13			B	216
,,	6	3			,,	,,
,,	11	31			,,	,,
1415	5	34			V	7
1416	5	29			B	216
1417	4	54			,,	,,
,,	10	20			,,	,,
1420	8	34			V	7
1421	8	28			,,	,,
1422	1	56			,,	,,
1423	6	47			,,	,,
1425	10	3			B	216
1430	8	6		Obscured by rain.	V	9
1432	1	58			,,	

A.D. 1435	11	5		V	10
1439	8	13		B	216
1440	1	41		,,	,,
1441	1	36	Not observed.	V	10
,,	7	33		B	216
1442	6	27		,,	,,
1443	6	21		,,	,,
,,	11	49		,,	,,
1444	10	43		V	10
1445	4	41		,,	,,
1446	4			B	216
1447	8	57		V	10
1448	2			B	216
1451	6	5	Not observed.	V	11
1452	11	56		,,	,,
1454	4	19		,,	,,
1455	4	13		,,	,,
1458	2			B	216
1460	7	12		V	12
1461	11	34		,,	,,
1463	5	46	**B** makes this the 26th day of cycle.	,,	,,
1464	4	20	Not observed.	,,	13
1467	2	34		,,	,,
1468	2	29		B	216
,,	12	24		,,	,,

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 1469	6	50			V	13
1470	6	45			,,	,,
1473	4	58			,,	,,
1474	9	50			,,	,,
1475	8	44			B	216
,,	9	44			V	13
1476	2	12			,,	14
1482	5	42			B	216
1484	9	22			V	14
1485	8	16			,,	,,
1486	2	34			B	216
1488	6	30			V	15
1489	10	21			B	216
,,	12	21			V	15
1494	3	16			B	216
1495	2	52			V	15
,,	3	22			B	216
,,	8				,,	,,
1498	Intl	59			V	15

A.D. 1500	5	51		V	15
1501	9	13		„	„
1502	5	7		B	216
„	9	7		V	15
1506	3	12		B	216
1507	1	12	Total.	V	16
1514	8	28	8 digits 67 m.	„	„
1515	12	50		„	„
1517	6	42		„	„
1518	5	36		„	„
1520	3	50		B	216
1521	3	50		V	16
1525	12	52		B	216
1526	5	20	H gives this the 14th day of cycle.	„	„
1527	5	14	Total.	V	17
1528	5	8		B	216
1529	10	60		V	17
„	12	60		B	216
1540	3	30	Not visible to the imperial astronomers.	„	„
1542	7	46		V	17
1543	1	43		„	18
1545	5	59		„	„
1548	3			B	216
1549	3	8		V	18
1553	1	15	Obscured by clouds.	„	„

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 1555	11	29				
1556	10	23			V	18
1561	2	28		Not visible.	,,	,,
,,	7	26			,,	,,
1564	5	39			,,	,,
1566	4	59			,,	,,
1569	1				,,	,,
1570	1	42			B	216
1572	6	52			V	19
1575	4	6		Between 1 & 3 p.m. the stars shone bright. After 3 it became light. (B)	,,	20
1577	In8	22		Obscured by clouds.	,,	,,
1580	2	8			,,	,,
					,,	,,

Year.	Month.	Day of cycle.	Longitude.	Portion eclipsed.	Beginning.	Middle.	End.		Book.	Section.
A.D. 1582	6	24							V	20
1583	11	16							,,	,,
1587	9	24		Obscured by clouds.					,,	,,
1589	1	46							,,	,,
1590	7	37							,,	,,
1593	10			2 digits.					B	216
1594	4	46							V	20
1596	In8	2							,,	,,
1603	4	24							,,	21
1604	4	18							,,	,,
1607	2			Not visible.	Recorded by Gaubil.					
1610	11	39							V	21
1612	5	31							,,	,,
1615	3	44							,,	,,
1616	3	8							,,	,,
1617	7	60							,,	,,
1621	4	9							,,	22
1626	7	8		Obscured by clouds.					,,	,,
1629	5	22							,,	23

SOLAR ECLIPSES.

Year.	Month.	Day of cycle.	Longitude.	Portion eclipsed.	Beginning.	Middle.	End.		Book.	Section.
A.D. 1631	10	38							V	23
1634	3	24							,,	,,
1637	1	38							,,	,,
1641	10	40							,,	24
1643	2	2							,,	,,
1644	8	53	張 8° 18′	2 dig. 46 m.	11.1 a.m.	0.17 p.m.	1.29 p.m.		C	263
1645	12	16		Obscured by clouds. 7 to 9. a.m.					,,	,,
1648	5	2	觜 11° 7′	9 dig. 12 m.	5.33 a.m.	6.52 a.m.	8. a.m.		,,	,,
1650	11	18	亢 2° 15′	7 ,, 42 ,,	10.36 ,,	0.1 p.m.	1.35 p.m.		,,	,,
1657	5	40	觜 2° 12′	6 ,, 37 ,,	4.19 ,,	5.9 a.m.	6.4 a.m.		,,	,,
1658	5	34	畢 6° 57′	4 ,, 25 ,,	8.54 ,,	10.11 ,,	11.39 ,,		,,	,,
1664	12	55	斗 21° 20′	8 ,, 54 ,,	3.21 p.m.	4.37 p.m.	5.46 p.m.		,,	,,
1666	6	47	井 9° 45′	9 ,, 47 ,,	3.29 ,,	4.41 ,,	5.44 ,,		,,	,,
1669	4	60	鬼 11°	5 ,, 29 ,,	1.8 ,,	2.27 ,,	3.43 ,,		,,	,,
1671	8	16	張 9° 29′	1 ,, 59 ,,	4.24 ,,	5.7 ,,	5.44 ,,		,,	,,
1676	5	19		Under 1 dig.		6.15 ,,	7.10 ,,		,,	,,
1681	8	18	奎 0° 23′	3 dig. 49 m.	8.22 a.m.	9.22 a.m.	10.35 a.m.		,,	,,
1685	11	54	心 1° 22′	2 ,, 19 ,,	3.8 p.m.	3.58 p.m.	4.44 p.m.		,,	,,
1688	4	40	婁 10° 59′	9 ,, 49 ,,	8.8 a.m.	9.19 a.m.	10.39 a.m.		,,	,,

A.D. 1690	8	56	張	9°	20′	2 dig.	44 m.	6.50 a.m.	7.35 a.m.	8.26 a.m.	C	263
1691	2	54	危	10°	52′	3 ,,	21 ,,	0.2 p.m.	1.20 p.m.	2.28 p.m.	,,	,,
1692	1	48	虛	9°	34′	5 ,,	17 ,,	11.48 a.m.	1.14 ,,	2.47 ,,	,,	,,
1695	11	56	尾	3°	26′	8 ,,	33 ,,	3.43 p.m.	4.51 ,,	5.57 ,,	,,	,,
1697	In3	18	箕	1°	57′	10 ,,	22 ,,	7.53 a.m.	9.7 a.m.	10.22 a.m.	,,	,,
1704	11	34	心	1°	26′	4 ,,	37 ,,	0.56 p.m.	2.15 p.m.	3.22 p.m.	,,	,,
1706	4	25	胃	8°	18′	6 ,,	23 ,,	6.21 ,,	7.13 ,,	8.3 ,,	,,	,,
1708	8	41	翼	1°	42′	5 ,,	19 ,,	4.52 ,,	5.48 ,,	6.39 ,,	,,	,,
1709	8	36	張	9°	26′	4 ,,	54 ,,	6.8 a.m.	6.59 a.m.	7.59 a.m.	,,	,,
1712	6	50	井	10°	32′	5 ,,	41 ,,	3.40 ,,	4.31 ,,	5.25 ,,	,,	,,
1715	4	3	箕	12°	19′	6 ,,	12 ,,	6.11 p.m.	7.2 p.m.	7.51 p.m.	,,	,,
1719	1	11	房	0°	45′	0 ,,	7 ,,	3.7 ,,	4.20 ,,	5.29 ,,	,,	,,
1720	7	3	柳	5°	16′	7 ,,	2 ,,	10.34 a.m.	0.12 ,,	1.45 ,,	,,	,,
1721	In6	57	井	29°	42′	4 ,,	2 ,,	5.7 p.m.	5.59 ,,	6.47 ,,	,,	,,
1730	6	35	井	20°	42′	9 ,,	22 ,,	11.1 a.m.	0.46 ,,	2.30 ,,	,,	,,
1731	12	27	斗	0°	26′	9 ,,	11 ,,	6.53 ,,	7.25 a.m. sun rose eclipsed 6 dig. to 40 m.			
									7.49 a.m.	9.5 a.m.	,,	,,
1735	9	34	角	2°	5′	8 ,,	21 ,,	7.47 ,,	8.59 ,,	10.18 ,,	,,	,,
1742	5	56	畢	7°	17′	7 ,,	4 ,,	6.41 ,,	7.37 ,,	8.38 ,,	,,	,,
1745	3	10	壁	6°	49′	1 ,,	10 ,,	10.57 ,,	11.46 ,,	0.30 p.m.	,,	,,
1746	3	4	室	11°	23′	6 ,,	57 ,,	9.35 ,,	11.5 ,,	0.40 ,,	,,	,,
1747	7	26	柳	6°	33′	2 ,,	21 ,,	4.59 p.m.	5.40 p.m.	6.18 ,,	,,	,,
1751	5	34	昴	7°	37′	4 ,,	41 ,,	6.49 a.m.	7.39 a.m.	8 33 a.m.	,,	,,
1758	12	50	斗	1°	51′	8 ,,	51 ,,	3.5 p.m.	4.20 p m.	4.36 p.m. sun set eclipsed 7 dig. 23 m.	,,	,,

Year.	Month.	Day of cycle.	Longitude.	Portion eclipsed.	Beginning.	Middle.	End.		Book.	Section.
A.D. 1760	5	41	參 1° 17′	9 dig. 42 m.	4.26 p.m.	5.27 p m.	6.23 p.m.		C	263
1762	9	57	角 3° 26′	5 „ 40 „	4.50 „	5.82 p.m. sun set eclipsed 6 dig. 40 m.			„	„
1763	9	52	軫 6° 1′	7 „ 7 „	6.9 a.m.	6.18 a.m. sun rose eclipsed 1 dig. 34 m.			„	„
						7.2 a.m.	8. a.m.		„	„
1769	5	19	畢 8° 38′	3 „ 35 „	5.5 p.m.	5.47 p.m.	6.28 p.m.		„	„
1770	5	14	昴 7° 34′	3 „ 53 „	7.35 a m.	8.26 a.m.	9.22 a.m.		„	„
1773	3	27	室 12° 37′	4 „ 12 „	1.18 p.m.	2.40 p.m.	3.54 p.m.		„	„
1774	8	19	張 10° 53′	3 „ 51 „	7.14 a m.	8.12 a.m.	9.18 a.m.		„	„
1775	8	13	張 0° 6′	4 „ 33 „	11.21 „	0.52 p m,	2.17 p.m.		„	„
„	12	41	斗 23° 43′	1 „ 47 „	9.36 „	10.20 a.m.	11.6 a.m.		„	„
1784	7	51	柳 16° 21′	1 „ 55 „	5.32 „	6.14 „	6.59 „		„	„
1785	7	45	柳 5° 34′	4 „ 17 „	6.42 „	7.43 „	8.53 „		„	„

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
B.C. 436				This is recorded by Gaubil, in Souciet's "Observations Mathematiques, etc." Tome 3, p. 367.		
209				This is quoted in the 太平御覽 *Taé-pîng-yú-làn.* Book 4.		
141	10				W	
A.D. 62	7				D	11
89	In7				F	12
100	1				,,	,,
146	12				,,	,,
157	11			This is recorded by Gaubil.	,,	,,
,,	12	59				
165	1	18			,,	28
175	12				,,	12
179	3				,,	,,
221	7			This is recorded by Gaubil.	,,	
307						
311	3	9		This is recorded as twice total the same night, in the 3rd and 4th watches.	H	12
434	7	13	室 15°	Begin. 4th watch 2 chang. Total, 4th watch 4 chang.	,,	,,
436	12	6	鬼 4°	Begin. 9 to 11 p.m. Total, 1st watch 3 chang.	I	,,

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 437	5		斗 26°	Total 4th watch.	I	23
„	12	14	井 28°	Begin. 2 watch 4 chang. Total, 3 watch 1 chang.	„	12
438	5		斗 16°		„	„
440	9		昴 1°50	Begin. 2 watch 1 chang. In the 3rd watch eclipsed 12 digits.	„	„
451	8		奎 11°	4th watch.	„	„
459	9		胃 end	Total, 2nd watch.	„	„
467	10	30	參		K.	31
478	9	57	昴	Seen at intervals between dark clouds.	„	„
480	2	19			„	„
482	1	8			„	„
„	7	4			„	„
484	5	24	斗	Total.	„	„
485	11	15			„	„
487	9	35	胃	Seen at intervals between dark clouds.	„	„
488	9			Total.	„	„
489	3	26	角	7 digits.	„	„
„	8	23		A little cloudy.	„	„
491	1	46	張		„	„
„	12	28		Total.	„	„

A.D.	492	12	34	柳		K 151
	494	4	57	斗		,, ,,
	496	10	43	畢		,, ,,
	498	2	14	角		,, ,,
	499	2	59	軫		,, ,,
	500	1	53	翼	3 digits.	,, ,,
	503	5	4	斗	Moon rose eclipsed 12 digits.	,, ,,
	505	9	20	昴	10 digits.	,, ,,
	506	3	17	氐	Total.	,, ,,
	509	1	31	翼	12 digits.	,, ,,
	510	1	25	張		,, ,,
	,,	In	22	危		,, ,,
	,,	12	19	張		,, ,,
	513	4	36	翼	Moon rose eclipsed 12 digits, and gradually became total	,, ,,
	,,	10	33	參	Total.	,, ,,
	514	4	30	尾	14 digits. Moon rose eclipsed.	,, ,,
	515	8	46	奎	8 digits.	,, ,,
	516	3	44	軫		,, ,,
	,,	8	44	畢	Total.	,, ,,
	,,	12	57	柳	10 digits.	,, ,,
	522	12	51			,, ,,
	523	5	44			,, ,,
	,,	11	46	井		,, ,,
	525	9	54			,, ,,
	530	3	1	參		,, ,,

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 530	5	21		U makes this the 27th day of cycle, between 11 p.m. and 1 a.m.	K	151
531	5	21		Total.	,,	,,
532	4	15	箕		,,	,,
534	10	13	參		,,	,,
535	3	35	亢		,,	,,
536	2	24			,,	,,
538	6	40			,,	,,
539	10	31			,,	,,
541	4	29			,,	,,
543	3	43		U makes this the 42nd day of cycle, 3 watch 3 chang.	,,	,,
549	11	4			,,	,,
570	9	57	婁	Total. The moon did not appear after its emersion.	M	5
577	1	13			**A**	285
584	12	40	鬼 3°	10 digits. Begin. N.E. 1 watch 1 chow, Mid. 1 watch 4 chow, End. 2 watch 1 chow.	N	17
586	6			Begin. E. obscured by clouds. Reaching S.E. the moon was seen through the clouds $\frac{2}{3}$ eclipsed; when clouds from the N.E. limb again covered it. Towards the S. point it gradually decreased; and when seen through the clouds beyond the S. point, the eclipse was over.	,,	,,

A.D. 590	3	40	氐 7°	Moon rose half eclipsed on the E., at E.S.E. it was about $\frac{2}{3}$ eclipsed; and then decreased to S.S.E.	N	17
„	9	37	胃 4°	12 digits on S. limb. Begin. 0.30 p.m. Mid. 2 p.m. End. 3.23 p.m.	„	„
592	7	56	室 7°	11 digits on N.W. limb. Begin. 1 watch 3 chang.	„	„
593	7			8 digits on N.E. limb, was eclipsed at 5 watch 1 chang when it disappeared among the clouds.	„	„
595	11	7	井 17°	11 digits on the N.W. limb. Begin. S.E. 1 watch 4 ch. Mid. S.S.E. 2 watch 3 ch. End. S. 3 watch 1 ch.	„	„
596	11	2	井 17°	3 watch 1 chow the moon was seen through the clouds, on the meridian, eclipsed 3 digits on the E. limb. At the 4th watch it was total, and was off on the S.E. limb. At 4 watch 3 ch. it ended on the S.W. limb. U makes this the 1st day of cycle.	„	„
618	9	54			Z	24
619	In2	16			„	„
621	12	4			„	„
623	6	57			„	„
„	12	54			„	„
624	11	52			„	„
625	4	52			„	„
626	10	7			„	„
628	2	29			„	„
629	2	24			„	„
630	7	15			„	„
632	6	34			„	„
„	11	32			„	„

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 633	5	28				
635	9	45			Z	42
637	9	34			,,	,,
639	1	32			,,	,,
640	7	47			,,	,,
,,	12	44			,,	,,
641	12	22			,,	,,
643	10	58			,,	,,
644	10	52			,,	,,
647	8	57			,,	,,
648	4	42			,,	,,
649	12	22			,,	,,
650	6	19			,,	,,
,,	12	18			,,	,,
651	6	14			,,	,,
,,	11	11			,,	,,
653	10	30			,,	,,
654	9	25			,,	,,
657	11n	41			,,	,,

A.D.				Z	
657	7	38			
661	11	43			
662	5	21			
664	9	57			
667	12In	8			
669	12	57			
670	6	54			
672	4	59			
,,	10	50			
673	4	7			
675	8	23			
676	2	21			
677	7	12			
680	9	22			
,,	12	34			
682	3	45			
683	9	37			
684	2	54			
,,	8	31			
686	7	50			
687	10	42			
688	6	18			
689	10	1			
690	4	58			
691	10	22			

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 693	2	12			Z	42
695	7	58			,,	,,
697	6	22			,,	,,
699	1	8			,,	,,
700	1	3			,,	,,
,,	9	28			,,	,,
701	9	22			,,	,,
702	9	17			,,	,,
703	8	10			,,	,,
704	1	39			,,	,,
,,	7	35			,,	,,
705	1	33			,,	,,
706	12	21			,,	,,
707	10	26			,,	,,
711	8	54			,,	,,
712	3	52			,,	,,
,,	8	8			,,	,,
714	12	5			,,	,,
715	12	59			,,	,,

A.D.	716	6	57	Z	42
	717	5	51	,,	,,
	718	10	13	,,	,,
	722	2	24	,,	,,
	723	1	18	,,	,,
	,,	7	15	,,	,,
	724	7	10	,,	,,
	744	11	44	,,	,,
	759	2	10	,,	,,
	,,	8	4	,,	,,
	762	6		Q	29
	,,	12	57	Z	42
	765	3	8	,,	,,
	910	12	7	A	285
	925	3	45	,,	,,
	,,	9	41	,,	,,
	928	12	52	,,	,,
	929	6	50	,,	,,
	,,	12	47	,,	,,
	937	7	3	,,	,,
	940	11	14	,,	,,
	944	3	25	,,	,,
	,,	9	22	,,	,,
	947	12	32	U	53
	967	11		B	217

Began, 4 watch 4 teen. [according to prediction:
This was calculated by the Leaou astronomers, but did not occur

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 968	11	27				
969	10	25			A	285
970	4	22			,,	,,
972	8	39			,,	,,
974	8	27		This did not occur according to prediction.	,,	,,
977	6	41		Total.	,,	,,
,,	11	39			,,	,,
978	10	3		Obscured by clouds and invisible.	,,	,,
980	8	52		Total.	,,	,,
984	1	3			,,	,,
985	7	55		This did not occur according to prediction.	,,	,,
987	5	24			,,	,,
989	3	34		This did not occur according to prediction.	,,	,,
990	3	27			,,	,,
991	8	19		Total.	,,	,,
992	1	40			,,	,,
,,	8	13		Obscured by clouds and invisible.	,,	,,
994	6	32			,,	,,
,,	12	30		Total.	,,	,,
					,,	,,

A.D. 995	6	26	Obscured by clouds and invisible.	A	285
,,	12	24		,,	,,
996	10	48		,,	,,
998	10	37		,,	,,
999	9	32		,,	,,
1000	2	59		,,	,,
,,	8	57		,,	,,
1001	8	51		,,	,,
1002	1	48		,,	,,
,,	7	45		,,	,,
1003	1	41		,,	,,
,,	7	39		,,	,,
1004	11	2		,,	,,
1005	5	59		,,	,,
,,	10	27		,,	,,
1006	11	50		,,	,,
1007	5	48	Obscured by clouds and invisible.	,,	,,
,,	9	15	This did not occur according to prediction.	,,	,,
1008	9	10		,,	,,
1009	9	4	This did not occur according to prediction.	,,	,,
1010	2In	1		,,	,,
1012	1	21	Obscured by clouds and invisible.	,,	,,
,,	7	17		,,	,,
,,	12	14		,,	,,
1015	10	28		,,	,,

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book	Section.
A.D. 1016	4	26		Obscured by clouds and invisible.	A	285
1018	4	19			,,	,,
,,	10	17			,,	,,
1020	2	30			,,	,,
1021	8	30			,,	,,
1024	5	39		This did not occur according to prediction.	,,	,,
1026	5	55			,,	,,
1042	6	24			,,	,,
1045	4	37			,,	,,
,,	9	35			,,	,,
1046	9	29			,,	,,
1050	7	37			,,	,,
1052	11	35		Began at 4. a.m.	,,	,,
1053	10	48			U	53
1055	9	7			A	285
1056	8	1			,,	,,
1057	2	59			,,	,,
,,	8	55			,,	,,
1058	12In	18			,,	,,

A.D. 1059	6	15		A	285
„	12	12		„	„
1060	12	6		„	„
1062	10	26		„	„
1063	10	20	Greatest at 6.45 a.m.	U	53
1064	4	17		A	285
1067	2	31		„	„
1068	7	22		„	„
1069	11In	44	Begin. 10.30 p.m. Middle 12.15 a.m. End 2 a.m.	U	53
1070	5	42	Rainy and invisible.	A	285
1071	5	36		„	„
„	11	33	Begin. 5.30 a.m. Middle 6.30 a.m.	U	53
1073	3	55	Begin. 9.15 p.m. Middle 10.30 p.m. End 12 p.m.	„	„
„	9	52		A	285
1074	9	46	Begin. 4 watch 5 teen. Total 5 watch 3 teen.	U	53
1076	1	9		A	285
1077	1	3		„	„
„	7	60	Cloudy and invisible.	„	„
1078	1	57		„	„
„	6	55		„	„
1079	6	49	Cloudy and invisible.	„	„
1080	10	11	Cloudy and invisible.	„	„
1081	4	8		„	„.
„	10	18		„	„
1082	10	60		„	„

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 1083	8	24		This did not occur according to prediction.	A	285
1084	2	22		Cloudy and invisible.	,,	,,
,,	8	18		Cloudy and invisible.	,,	,,
1085	8	13			,,	,,
1086	12	35		Cloudy and invisible.	,,	,,
1088	6	27			,,	,,
,,	12	24		Cloudy and invisible.	,,	,,
1089	5	21			,,	,,
1090	5	15		Cloudy and indistinct.	,,	,,
1091	4	40		Cloudy and indistinct.	,,	,,
1092	3	35			,,	,,
1093	9	26		Cloudy and invisible.	,,	,,
1096	7	40		Cloudy and invisible.	,,	,,
1097	1	37		Cloudy and invisible at first; visible afterwards.	,,	,,
1098	5	59		Did not appear as predicted.	,,	,,
1099	5	53			,,	,,
,,	10	51			,,	,,
1100	10	45			,,	,,
1103	2	1			,,	,,

A.D. 1103	8	58		A	285
1104	2	56		,,	,,
,,	8	53		,,	,,
1105	12	15	Middle 4.45 p.m. End 7 p.m.	U	53
1106	6	12		A	285
,,	12	9		,,	,,
1109	10	23		,,	,,
1110	4	21		,,	,,
,,	9	17		,,	,,
1111	3	15		,,	,,
,,	9	11		,,	,,
1113	6	34		,,	,,
,,	7	31		,,	,,
1114	1	28		,,	,,
1116	11	42		,,	,,
1117	11	36		,,	,,
1118	5	33		,,	,,
1120	3	53		,,	,,
1124	1	60		,,	,,
,,	12	55		,,	,,
1129	2	19		,,	,,
1131	8	16	Obscured by clouds and invisible.	,,	,,
1132	2	13	This occurred contrary to calculation.	,,	,,
,,	7	11		,,	,,
1133	7	5		,,	,,

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 1134	12	27				
1135	11	22			A	285
1136	5	18			T	20
,,	11	16			A	285
1138	3	38			,,	,,
,,	9	34			,,	,,
1139	9	29			,,	,,
1142	7	43		Cloudy and invisible.	,,	,,
1143	6	37			,,	,,
,,	12	35		Cloudy and invisible.	,,	,,
1144	6	31			,,	,,
1145	5	56		Cloudy and invisible.	,,	,,
1146	4	51			,,	,,
1151	2	53		Visible at Peking. Obscured by clouds at Hang-chow.	,,	,,
1152	12	13			T	20
1153	12	7			,,	,,
1154	3	18			,,	,,
,,	11	1			,,	,,
1155	5	59			,,	,,
					A	285

A.D. 1157	9	14		A	285
1158	2	18		T	20
1160	1	31		,,	,,
1161	7	22		,,	,,
1164	2	36		A	285
,,	11	33	Total.	T	20
1165	4	31	Cloudy and invisible.	A	285
1168	2			,,	,,
1169	2	38		,,	,,
1170	11	34		,,	,,
1172	6	49		,,	,,
1174	4	9	Cloudy and invisible.	,,	,,
1175	4	3		,,	,,
,,	9	60		,,	,,
1176	3	57		T	20
,,	9	54		,,	,,
1178	2	16	Cloudy and invisible.	A	285
1179	1	11	Total.	T	20
1181	11	24		A	285
1182	11	18	Total.	T	20
1183	5	16	Total.	,,	,,
1185	3	35		A	285
,,	9	32		,,	,,
1186	3	29	Visible at Peking. Obscured by clouds at Hang-chow.	T	20
,,	8	3		A	285

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 1187	8	21			A	285
1189	12	38		Total.	T	20
1190	6	34		Total.	,,	,,
,,	12	32			,,	,,
1191	6	29			,,	,,
1192	4	54		A marks this on the 42nd day of the cycle.	,,	,,
1193	9	45			,,	,,
1194	10	40		Visible at Peking. A makes this the 9th month, cloudy and invisible at Hangchow.	,,	,,
1196	8	59			,,	,,
1197	2	56		A makes this the 7th month. Total.	,,	,,
1198	1	51			,,	,,
,,	7	47			,,	,,
1200	5	7			,,	,,
1201	11	58			,,	,,
1202	5	56			,,	,,
1203	3	20			,,	,,
1204	9	12			,,	,,
1205	3	9			,,	,,

A.D. 1205	8	6	Visible at Peking. Cloudy and invisible at Hangchow.	T	20
1207	1	28	A gives this the 29th day of the cycle.	,,	,,
,,	7	25		,,	,,
1208	1	28	A makes this the 2nd month, rainy and invisible at Hangchow.	,,	,,
,,	12	17		A	285
1209	6	14		T	20
,,	10	2		,,	,,
1210	11	47		,,	,,
	8	44	The year is probably omitted here.	A	285
1214	2	47		T	20
,,	8	44		,,	,,
1215	8	38	Total.	,,	,,
1216	2	36		,,	,,
,,	In7	32	Visible at Peking. Cloudy and invisible at Hangchow.	,,	,,
1217	12	55		,,	,,
1218	6	52		,,	,,
,,	11	49	Total. C makes this the 12th month.	,,	,,
1219	5	47	Total. Visible at Peking. Cloudy and invisible at Hangchow.	,,	,,
,,	11	42	A makes this the 43rd day of the cycle.	,,	,,
1220	5	41	Visible at Peking. Cloudy and invisible at Hangchow.	,,	,,
1221	10	3		A	285
1222	3	40	Cloudy and invisible.	,,	,,
,,	4	60		T	20
1223	3	54	Cloudy and invisible.	A	285
1258	10	28		B	217

Year.	Month.	Day of cycle.	R. A.		Book.	Section.
A.D. 1270	3	51		Begin. 1.45 a.m. Middle 3.15 a.m. End. 4.30 a.m.	U	53
1272	7	8		Begin. 1.15 a.m. Middle 2.30 a.m. End. 3.45 a.m.	,,	,,
1277	4	10		Begin. 0.30 a.m. Total 1.45 a.m. Middle 2.15 a.m. Light reappeared 2.45 a.m. End. 4 a.m.	,,	,,
1279	2	29		Begin. 0.15 a.m. Middle 1.30 a.m. End. 2.45 a.m.	,,	,,
,,	8	26		Begin. 2.15 a.m. Middle 3.15 a.m. End. 4 a.m.	,,	,,
1280	8	21		Began in the daylight. End. 7.15 p.m.	,,	,,

Year.	Month.	Day of cycle.	Longitude.	Portion eclipsed.	Beginning.	Total. immersion.	Middle.	Emersion.	End.	Book.	Section.
A.D.											
1320	6	59		Total.						U	27
1324	4	8		Total.						,,	29
1334	3	40		Total.						E	16
1335	3	34								U	38
1337	1	53								,,	39
1339	6	39								,,	40
1341	5	59								,,	,,
,,	10	55		Total.						,,	,,
1343	10	44								,,	41
1344	In2	12								,,	,,
1353	3									B	217
1388	4			This is a preannouncement in an imperial rescript, 2nd moon.						G	9
1493	1	30								F	26
1450	1	28		Eclipsed at 6.45 a.m.						V	31
1460	In11			G notices this, but not as an intercalary month.						F	27
1479	11	35								V	31
1518	10									,,	,,
1519	9									H	60

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	Longitude.	Portion eclipsed.	Beginning.	Total. immersion.	Middle.	Emersion.	End.	Book.	Section.
A.D.											
1519	10										
1548	3									H	60
1570	7										"
1577	In8			This is recorded in Gaubil's "Observations Mathematiques."						B	217
1589	12			Do.		do.		do.			
1592	3			End between 5 and 7 a.m. This is given as a prediction of the Astronomical Board.							
"	5									B	217
1601	5			Recorded in Gaubil's "Observations Mathematiques."						V	31
1602	4				Do.		do.				
"	10				Do.		do.				
1606	2				Do.		do.				
1616	1				Do.		do.				
1617	1				Do.		do.				
1623	9				Do.		do.				
1624	8				Do.		do.				
1627	12				Do.		do.				
1631	4	55								V	31

A.D.																				
1632	9																	V	31
1636	1	58			dig.	m.												,,	,,
1645	1	36	星	0° 16′	8	33	1.3	a.m.			2.45	a.m.			4.28	a.m.		C	264
,,	In6	33	女	8° 15′	11	59	7.15	p.m	8.19	p.m.	8.59	p.m.	9.41	p.m.	10.44	p.m.		,,	,,
1646	6	28	牛	5° 19′	12	49	10.49	,,	11.59	,,	0.47	a m.	1.34	a.m.	2.44	a.m.		,,	,,
,,	12	25	鬼	0° 8′	3	52	3.54	a.m.			5.5	,,			6.17	,,		,,	,,
1648	In4	46	尾	4° 50′	3	53	6.48	p.m			7.59	p.m.			9.10	p m.		,,	,,
1650	4	36	氐	14° 46′	6	35	2.16	a.m.			3.45	a.m.			5.14	a.m.		,,	,,
1652	8	52	室	6° 37′	8	36	0.47	,,			2.24	,,			4.1	,,		,,	,,
1653	7	46	危	16° 24′	15	49	4.46	p.m.	5.39	,,	6 40	p.m.	7.40	p.m.	8.34	p.m.		,,	,,
1655	12	3	井	21° 2′	9	4	2.46	a.m.			4 26	a.m.			6.6	a.m.		,,	,,
1656	In5	59	斗	9° 25′	13	5	7.42	p.m.	8.49	,,	9 39	p.m.	10.30	,,	11 37	p.m.		,,	,,
,,	11	57	井	10° 6′	15	47	4 45	,,	5.41	,,	6 40	,,	7.39	,,	8.35	,,		,,	,,
1657	5	54	箕	8° 19′	10	45	2.35	a.m.	3 42	a.m.	4 26	a.m.	5.9	a.m.	6.16	a.m.		,,	,,
,,	11	52	箕	10° 30′	3	25	1.44	,,			2.53	,,			4.1	,,		,,	,,
1659	In3	14	氐	5° 50′	7	36	2.10	,,			3.42	,,			5.14	,,		,,	,,
1660	3	8	亢	6° 9′	16	42	3.9	p.m.	4.10	p.m.	5.8	p.m.	6.6	p.m.	7.7	p.m.		,,	,,
,,	9	4	奎	7° 58′	18	14	6.0	,,	6.56	,,	7.57	,,	8.57	,,	9.54	,,		,,	,,
1661	3	2	角	6° 3′	3	37	10.21	,,			11 33	,,			0.44	a.m		,,	,,
1663	7	19	婁	6° 51′	15	40	2.6	a.m.	3.17	a.m.	3.56	a m	4.35	a.m.	5 55	,,		,,	,,
1664	1	15	星	0° 11′	16	25	8.27	p.m.	9.20	p.m.	10.21	p.m.	11.22	p.m.	0.15	,,		,,	,,
1666	5	32	尾	15° 0′	2	38	2.4	a.m.			3 5	a.m.			4 7	,,		,,	,,
,,	11	29	箕	0° 49′	7	47	8 47	p m.			10.28	p.m.			0.8	,,		,,	,,
1668	10	17	昴	1° 44′	5	31	9.34	,,			11.0	,,			0 25	,,		,,	,,

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	Longitude.	Portion eclipsed.	Beginning.	Total immersion.	Middle.	Emersion.	End.	Book.	Section.
A.D.				dig. m.							
1670	In3	40	軫 9° 50′	8 0	5.22 p.m.		7.4 p.m.		8.47 p.m.	C	246
1671	2	22	翼 15° 46′	17 7	5.9 ,,	6.18 p.m.	7.12 ,,	8.7 p.m	9.16 ,,	,,	,,
,,	8	32	室 6° 44′	16 39	0.41 a.m.	1.37 a.m.	2.37 a.m.	3.37 a.m.	4.33 a.m.	,,	,,
1672	2	28	翼 4° 45′	4 11	8.53 p.m.		10.8 p.m.		11.23 p.m.	,,	,,
1674	6	45	斗 19° 36′	11 41	2.26 a.m.	3.32 ,,	4.19 a.m.	5.6 ,,	6.13 a.m.	,,	,,
,,	12	43	井 21° 6′	15 50	1.21 ,,	2.17 ,,	3.16 ,,	4.15 ,,	5.11 ,,	,,	,,
1677	10	55	胃 5° 10′	6 0	5.28 p.m.		6.56 p.m.		8.24 p.m.	,,	,,
1678	In3	54	氐 5° 48′	17 44	10.34 ,,	11.35 p.m.	0.34 a.m.	1.32 ,,	2.33 a.m.	,,	,,
,,	9	50	婁 7° 13′	18 40	2.16 a.m.	3.13 a.m.	4.13 ,,	5.14 ,,	6.11 ,,	,,	,,
1679	3	48	亢 5° 51′	4 37	5.11 ,,		6.33 ,,		7.54 ,,	,,	,,
,,	9	44	奎 8° 4′	6 9	5.47 p.m.		7.15 p.m.		8.40 p.m.	,,	,,
1681	1	6	張 13° 25′	7 52	5.25 ,,		7.4 ,,		8.42 ,,	,,	,,
1682	1	1	張 2° 38′	16 46	4.56 a.m.	5.49 ,,	6.50 a.m.	7.52 ,,	8.45 a.m.	,,	,,
1683	1	55	星 0° 20′	4 12	9.25 p.m.		10.38 p.m.		11.52 p.m.	,,	,,
1684	11	15	井 0° 14′	7 40	4.57 a.m.		6.36 a.m.		8.14 a.m.	,,	,,
1685	5	12	尾 15° 4′	14 31	11.42 p.m.	0.37 ,,	1.36 ,,	2.35 ,,	3.29 ,,	,,	,,
,,	11	9	箕 0° 17′	18 13	4.20 a.m.	5.30 ,,	6.25 ,,	7.20 ,,	8.30 ,,	,,	,,
1686	In4	6	尾 5° 0′	8 52	5.10 p.m.		6.49 p.m.		8.28 p.m.	,,	,,

A.D.					dig	m.												
1686	10	3	畢	4° 8′	5	47	5.39	a.m.			7.7	a.m.		8.35	a.m.	C	264
1688	3	26	角	7° 13′	7	22	0 35	,,			2.13	,,		3.51	,,	,,	,,
,,	9	22	壁	12° 3′	7	14	5 19	p.m.			6 51	p.m.		7.23	p.m.	,,	,,
1689	3	20	軫	9° 17′	18	3	0 26	a.m.	*2.34	a.m.	2.30	a.m.	3.25 a.m.	4.34	a.m.	,,	,,
1690	2	14	翼	15° 21′	4	52	4.46	,,			5.56	,,		7.16	,,	,,	,,
,,	8	11	室	6° 39′	4	13	8 12	p.m			9.27	p.m.		10.42	p.m.	,,	,,
1691	12	33	柳	7° 53′	8	49	8.14	,,			9.53	,,		11.31	,,	,,	,,
1693	6	24	斗	19° 19′	13	32	4.38	,,	5.40	p.m.	6.34	,,		7.27	,,	,,	,,
,,	12	22	井	20° 54′	3	31	6.14	,,			7.26	,,		8.38	,,	,,	,,
1695	4	44	心	3° 41′	5	12	5.32	,,			6.52	,,		8.12	,,	,,	,,
,,	10	41	鼎	2° 59′	5	45	1.36	a.m.			3.2	a.m.		4.28	a.m.	,,	,,
1697	9	30	鬼	7° 19′	6	32	2.23	,,			3 52	,,		5 20	,,	,,	,,
1699	2	52	翼	6° 2′	7	23	1.29	,,			3.5	,,		4.41	,,	,,	,,
,,	In7	49	危	17° 33′	8	19	4.41	p.m.			6.22	p.m.		8.4	p.m.	,,	,,
1700	7	43	危	6° 43′	16	47	6.37	,,	7.47	,,	8 41	,,	9.35 p.m.	10.45	,,	,,	,,
1701	1	41	張	2° 47′	4	26	5.59	a.m.			7.15	a.m.		8.30	a.m.	,,	,,
,,	7	37	盧	5° 52′	3	10	8.22	p.m.			9.29	p.m.		10 35	p.m.	,,	,,
1704	5	52	尾	15° 12′	10	3	0.33	a.m.	1.31	a.m.	2.17	a.m.	2.59 a.m.	4.1	a.m.	,,	,,
1706	9	8	奎	9° 29′	6	43	1.52	,,			3.21	,,		4.51	,,	,,	,,
1707	9	2	壁	12° 10′	18	1	4.46	p.m.	5.43	p.m.	6.43	p.m.	7.43 p.m.	8 40	p.m.	,,	,,
1708	8	57	壁	1° 28′	5	1	3.42	a.m.			5.4	a.m.		6.26	a.m.	,,	,,
1710	1	19	星	1° 46′	8	37	5.4	,,			6.42	,,		8.20	,,	,,	,,
,,	7	15	女	8° 27′	9	4	4.2	p.m.			5.46	p.m.		7.30	p.m.	,,	,,
,, ,,	12	13	柳	7° 56′	16	2	6.27	,,	7.23	,,	8.22	,,	9.21 ,,	10.17	,,	,,	,,

* This is probably a misprint for 1.34 a.m.

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	Longitude.	Portion eclipsed.	Beginning	Total immersion.	Middle.	Emersion.	End.	Book.	Section.
A.D.				dig. m.							
1711	6	10	牛 5° 39′	14 53	11.47 p.m.	0.43 a.m.	1.42 a.m.	2.40 a.m.	3.36 a.m.	C	264
,,	12	8	鬼 1° 25′	3 38	2.20 a.m.		3.32 ,,		4.44 ,,	,,	,,
1713	3	30	尾 6° 20′	3 53	1.3 ,,		2.15 ,,		3.26 ,,	,,	,,
1715	4	18	氐 15° 45′	6 59	6.43 p.m.		8.19 p.m.		9.55 p.m.	,,	,,
1717	8	35	室 7° 53′	7 19	0.8 a.m.		1.45 a.m.		3.22 a.m.	,,	,,
1718	2	31	翼 6° 0′	17 46	9.43 p.m.	10.36 p.m.	11.38 p.m.	0.40 a.m.	1.34 ,,	,,	,,
,,	8	29	危 17° 5′	17 55	1.36 a.m.	2.46 a.m.	3.41 a.m.	4.36 ,,	5.46 ,,	,,	,,
1719	7	23	危 6° 12′	4 21	3.9 ,,		4.27 ,,		5.46 ,,	,,	,,
1720	12	45	井 22° 8′	7 25	9.11 p.m.		10.51 p.m.		0.30 ,,	,,	,,
1721	11	39	井 10° 37′	18 28	8.22 ,,	9.32 p.m.	10.27 ,,	11.22 p.m.	0.32 ,,	,,	,,
1722	11	33	觜 10° 42′	6 3	9.59 ,,		11.29 ,,		1.0 ,,	,,	,,
1725	9	48	角 8° 14′	18 28	1.9 a.m.	2.12 a.m.	3.6 a.m.	4.0 a.m.	5.2 ,,	,,	,,
1726	3	44	奎 7° 51′	6 32	7.25 p.m.		8.57 p.m.		10.29 p.m.	,,	,,
1728	7	1	星 4° 8′	7 46	11.7 ,,		0.48 a.m		1.29 a.m.	,,	,,
1729	1	59	虛 5° 42′	16 24	2.42 a.m.	3.46 ,,	4.39 ,,	5.31 ,,	6.35 ,,	,,	,,
1730	6	49	鬼 4° 4′	3 11	10.46 p.m.		11.49 p.m.		0.53 ,,	,,	,,
1731	11	11	尾 9° 30′	5 22	6.15 ,,		7 40 ,,		9.5 p.m.	,,	,,
1732	5	9	畢 13° 11′	15 33	7.53 ,,	9.0 p.m.	9.53 ,,	10.46 p.m.	11.52 ,,	,,	,,

A.D.					dig.	m.														
1732	10	6	畢	5° 19′	17	54	3.54	a.m.	4.56	a.m.	5.49	a.m.	6.43	a.m.	7.45	a.m.	C	264
1733	4	4	心	3° 16′	7	23	1.28	,,			3.3	,,			4.37	,,	,,	,,
,,	10	60	昴	3° 43′	7	10	7.36	p.m.			9.6	p.m.			10.35	p.m.	,,	,,
1735	3	22	參	10° 13′	6	10	5.13	,,			6.42	,,			8.10	,,	,,	,,
1737	2	11	翼	6° 1′	5	24	10.44	,,			11.59	,,			1.13	a.m.	,,	,,
1738	12	31	鬼	2° 32′	5	52	5.28	a.m.			6.54	a.m.	(7.8	a.m.	set eclipsed 5′ 42″)		,,	,,
1739	6	27	斗	20° 43′	10	59	10.17	p.m.	11.31	p.m.	11.54	p.m.	0.17	a.m.	1.31	a.m.	,,	,,
,,	12	25	井	31° 28′	17	41	4.17	a.m.	5.22	a.m.	6.15	a.m.	7.8	,,				
							(7.17	,,	set eclipsed 8′ 37″)								,,	,,
1740	11	9	井	10° 3′	5	19	6.10	,,	(7.23	a.m.	set eclipsed 5′ 15″)						,,	,,
1742	4	41	氐	16° 50′	2	1	10.1	p.m.			10.56	p.m.			11.49	p.m.	,,	,,
,,	10	38	胃	6° 36′	5	44	6.53	,,			8.9	,,			10.25	,,	,,	,,
1743	4	35	氐	6° 1′	16	9	9.28	,,	10.33	p.m.	11.24	,,	0.16	a.m.	1.21	a.m.	,,	,,
1744	3	30	亢	5° 58′	6	57	2.54	a.m.			4.23	a.m.			5.12	,,	,,	,,
,,	9	27	奎	9° 42′	5	26	7.7	p.m.			8.28	p.m.			9.49	p.m.	,,	,,
1746	2	49	張	14° 51′	7	50	10.2	,,			11.28	,,			0.55	a.m.	,,	,,
1748	1	38	星	1° 21′	2	59	6.35	,,			7.37	,,			8.40	p.m.	,,	,,
1749	11	57	井	0° 28′	4	9	2.40	a.m.			3.51	a.m.			5.3	a.m.	,,	,,
1750	5	55	箕	0° 33′	13	38	3.2	,,	4.8	a.m.	(4.35	,,	set eclipsed 13′ 0″)				,,	,,
1751	10	46	畢	5° 23′	7	29	4.3	,,			5.27	,,			6.52	,,	,,	,,
1753	3	8	角	7° 31′	4	32	1.12	,,			2.25	,,			3.37	,,	,,	,,
,	9	5	奎	0° 21′	4	16	3.35	p.m.			4.49	p.m.			6.3	p.m.	,,	,,
							(5.35	,,	rose eclipsed 2′ 29″)									

LUNAR ECLIPSES.

Year.	Month.	Day of cycle.	Longitude.	Portion eclipsed.	Beginning.	Total immersion.	Middle.	Emersion.	End.	Book.	Section.
A.D.				dig. m.							
1754	8	59	壁 2° 22′	17 23	3.53 p.m.		5.51 p.m.	6.44 p.m	7.49 p.m.	C	246
					(5.49 ,, rose eclipsed 17′ 23″)						
1755	8	53	室 6° 57′	5 37	5.1 ,,		6.24 p.m.		7.48 ,,	,,	,,
					(6 4 ,, rose eclipsed 5′ 12″)						
1758	6	8	斗 20° 50′	14 22	10.35 ,,	11.36 p.m.	0.19 a.m.	2.3 a.m.	2.4 a.m.	,,	,,
,,	12	4	井 20° 58′	5 28	2.26 ,,		3 48 p.m.		5.9 p.m.	,,	,,
					(4.43 ,, rose eclipsed 2′ 42″)						
1760	10	24	昴 5° 17′	5 29	3.33 a.m.		4.48 a.m.		6.3 a.m.	,,	,,
1761	4	21	氐 16° 18′	14 50	4 14 ,,	(4.49 a.m. rose eclipsed 5′ 28″)				,,	,,
,,	10	18	胃 6° 42′	17 47	5.34 p.m.	6.47 p.m.	7.22 p.m.	8.13 p.m.	9.11 p.m.	,,	,,
1762	9	13	婁 8° 43′	5 52	2.59 a.m.		4 23 a.m.		5.46 a.m.	,,	,,
1765	2	29	張 14° 50′	17 12	7.17 p.m.	8.17 ,,	9.7 p.m.	9.58 ,,	10.58 p.m.	,,	,,
,,	7	25	危 7° 19′	18 39	9.57 ,,	10.56 ,,		0.38 a.m.	1.37 a.m.	,,	,,
1766	1	24	張 3° 46′	3 19	2.28 a.m.		3 34 a.m.		4.41 ,,	,,	,,
1768	11	6	井 0° 22′	17 28	9.10 p.m.	10.8 ,,	10.57 p.m.	11.47 p.m.	0.45 ,,	,,	,,
1771	9	51	奎 10° 54′	3 34	9.22 ,,		0 31 a.m.		1.40 ,,	,,	,,
1772	3	47	角 7° 29′	17 41	10.8 ,,	11.5 ,,	11.55 p.m.	0.59 a.m.	4.41 ,,	,,	,,
,,	9	45	壁 12° 56′	16 33	11.13 ,,	0.19 a.m.	1.11 a.m.	2.3 ,,	3.3 ,,	,,	,,

A.D.					dig.	m.										
1773	8	39	壁	1° 46′	6	33	0.19	a.m.			1.48	a.m.		3.17	a.m.	C	264
1775	1	1	星	2° 46′	5	19	9.29	p.m.			10.51	p.m.		0.14	,,	,,	,,
,,	12	55	柳	8° 16′	18	6	8.11	,,	9.15	p.m.	10.9	,,	11.1	p.m.	0.6	,,	,,	,,
1776	12	50	鬼	1° 26′	5	39	10.41	,,			0.4	a.m.			1.26	,,	,,	,,
1777	6	47	斗	20° 50′	0	57	7.57	,,			8.32	p.m.			9.8	p.m.	,,	,,
1779	10	4	昴	5° 7′	17	13	2.1	a.m.	3.0	a.m.	3.50	a.m.	4.40	a.m.	5.39	a.m.	,,	,,
1780	4	60	氐	15° 55′	9	30	5.16	p.m.			6.54	p.m.			8.32	p.m.	,,	,,
							(7.10 | ,, | rose eclipsed 9′ 7″)									
1782	8	16	室	8° 17′	3	16	9.5	,,			10.10	p.m.			11.16	,,	,,	,,
1783	2	15	翼	7° 37′	17	46	3.22	a.m.	4.23	a.m.	5.14	a.m.	6.5	,,	7.5	a.m.	,,	,,
							(6.2 | ,, | set eclipsed 10′ 24″)									
,,	8	11	危	17° 43′	17	38	5.9	,,	6.38	a.m.	7.29	a.m.	8.20	,,	9.18	,,	,,	,,
							(5.44 | ,, | set eclipsed 0′ 49″)									
1784	7	5	危	7° 19′	6	40	9.17	p.m.			10.39	p.m.			0.0	a.m.	,,	,,
1785	12	27	井	22° 24′	4	5	7.27	,,			8.37	,,			9.48	p.m.	,,	,,

The preceding list of 925 solar and 574 lunar eclipses has been collected from various Chinese sources accessible to me, and represents I believe nearly all that can be gathered from the native literature.

In the first column, the year does not exactly coincide with the European year of the same date; but represents the Chinese year, which generally commences in our January or February; so that there is frequently a discrepancy of one or two months. For instance the eclipse which took place on February 3rd, 1711, is registered as the 12th month of 1710; and that of January 24th, 1712, is put in the table the 12th month of 1711. The advantage of this notation, however, in a European point of view, amply compensates for the little apparent inconsistency; as, for example where we replace Kang-he 49, by A.D. 1710, or instead of Yung-ching 3 we write A.D 1725. To have reduced the table altogether to Gregorian time, would have involved a number of curious chronological problems, and far exceeded the time I could give to it.

In the second column "In." placed before some of the numbers, implies that they are intercalary months; thus "In. 7" is the "Intercalary 7th month."

The third column gives the number of the day in the sexagenary cycle; illustrating a practice which has existed from unknown antiquity, and is an invaluable resource for identifying the date of any eclipse.

In former times the method of dividing the night was into five 更 *kang* "watches," from the end of evening twilight, to the beginning of morning twilight, and each watch into five 唱 *ch'ang*, also called 籌 *ch'ow*, and 點 *tien* respectively, at different periods.

From the commencement of the present dynasty, the longitude of the luminaries at the middle of the eclipse, is given in a fourth column. This is according to the 28 constellations of the Zodiac, the distance being noted from the nearest determinant star on the west. Thus, for the year 1785, where we have 井 *Tsing* 22° 24′, suppose the longitude of *Tsing* to be 92° 30′, the place of the eclipse will be Long. 114° 54′. The following are the names of the twenty-eight constellations, and the longitudes of their determinant stars for A.D. 1800, as given by Biot in his "Précis de l'Histoire de l'Astronomie Chinoise."

角	*Këŏ*	201°	3′	0″	奎	*Kwei*	17°	48′	12″
亢	*K'ang*	211	42	1	婁	*Leu*	31	10	39
氐	*Tè*	222	17	35	胃	*Wei*	44	8	47
房	*Fâng*	240	8	48	昴	*Maòu*	57	12	1
心	*Sin*	245	0	25	畢	*Peĭh*	65	39	58
尾	*Wei*	253	27	15	觜	*Tsuy*	80	54	47
箕	*Kê*	268	28	15	參	*Ts'an*	79	34	6
斗	*Tòw*	277	23	6	井	*Tsìng*	92	30	21
牛	*Nêw*	301	15	11	鬼	*Kwei*	122	56	24
女	*Neu*	308	55	54	柳	*Lèw*	127	31	4
虛	*Heu*	320	36	16	星	*Sing*	144	29	44
危	*Wêĕ*	330	33	45	張	*Chang*	152	54	37
室	*Shĭh*	350	41	59	翼	*Yĭh*	170	56	9
壁	*Peĭh*	6	22	9	軫	*Chin*	187	56	52

Anterior to the present dynasty it was customary to record the positions of the heavenly bodies by equatorial measurement, which I have marked Right Ascension, although it differs from the application of that term in European Astronomy, in giving the place in degrees instead of hours. I merely make this remark for the better understanding of the ancient theory; for the recorded observations of olden times are of too rude a character, to render it of any great importance whether we consider them as Longitude or Right Ascension.

The fifth column gives the extent of the eclipse in digits and minutes, the diameters of the sun and moon respectively, being divided into 10 digits.

The five following columns give the times of Beginning, Total Immersion, Middle, Re-appearance of Light, and End of the Eclipse.

The two letters l. d. appended to many of the early eclipses signify that they occurred on the last day of the calendar month.

The two last columns shew the native authority and the section or book from which the record is copied. Seven of the solar and fourteen of the lunar eclipses, of which I have failed to find a notice in any Chinese work within my reach, are given on the authority of Gaubil, who professes to have extracted them from Chinese authors,—as published in the 3rd volume of Souciet's "Observations Mathématiques, Astronomiques, Geographiques, Chronologiques, et Physiques." The following are the several works indicated by the letters:

A 書經 *Shoo king.* Book of Government.
B 詩經 *She king.* Book of Odes.
C 春秋 *Ch'un ts'ew.* Spring and Autumn Annals.
D 史記 *Shè ké.* Historical Record.
E 前漢書 *Tseën hán shoo.* Book of the Former Han.
F 後漢書 *Hów hán shoo.* Book of the After Han.
G 三國志 *San Kwŏ ché.* Memoirs of the three Kingdoms.
H 晉書 *Tsín shoo.* Book of Tsin.
I 宋書 *Súng shoo.* Book of Sung.
J 陳書 *Ch'în shoo.* Book of Chin.
K 魏書 *Wei shoo.* Book of Wei.
L 北齊書 *Peh tse shoo.* Book of the Northern Tse.
M 周書 *Chow shoo.* Book of Chow.
N 隋書 *Suy shoo.* Book of Suy.
O 南史 *Nân shè.* Southern History.
P 北史 *Peh shé.* Northern History.
Q 新唐書 *Sin t'âng shoo.* New book of Tang.
R 舊五代史 *Kew woò taé shè.* Old history of the Five Dynasties.
S 遼史 *Leaou shè.* Leaou History.
T 金史 *Kin shè.* Kin History.
U 元史 *Yuên shè.* Yuen History.
V 明史 *Ming shè.* Ming History.
W 說苑 *Shwŏ yuên.* Flowers of Conversation.
X 古今注 *Koò kin choó.* Remarks on subjects, old and new.
Y 通志 *T'ung ché.* National archives.
Z 唐會要 *T'âng hwúy yaou.* Notabilia of the Tang Dynasty
& 通鑑綱目 *T'ung këën kang mŭh.* Mirror of History.
A 文獻通考 *Wăn hëën t'ung k'aŏu.* Antiquarian researches.
B 續文獻通考 *Sŭh wăn hién t'ung k'aòu.* Supplement to Antiquarian researches.
C 皇朝文獻通考 *Hwâng ch'ao wăn hëën t'ung k'aòu.* Antiquarian researches of the present Dynasty.
D 宏簡錄 *Hung këen lŭh.* History of the Middle ages.
E 續宏簡錄 *Sŭh hung këen lŭh.* Supplement to the History of the Middle ages.

F 鳳州綱鑑全編 *Fung chow kang kien tseuên pêen.* Fung-chow's Mirror of History.

G 明紀芳摹 *Ming kè fang moo.* Outline history of the Ming.

H 吾學編 *Woô hiŏ pêen.* History of the early Ming.

The Sung and Kin, who ruled contemporaneously, had their respective capitals at Hang-chow and Peking, and have each left a record of Astronomical observations. These must necessarily in great part refer to the same object; and it is worthy of remark how frequently the Hang-chow astronomers allude to the cloudy state of the atmosphere, as cutting off their view of the eclipses, while their contemporaries in the north register the same phenomena, without allusion to any cloudy interruptions in the clear atmosphere of Peking.

A good many of the eclipses are recorded as calculations, with a note appended to the effect that they were not seen by the official observers. Some of these were afterwards calculated by Schall, the President of the Astronomical Board at the commencement of the present dynasty, who found that eclipses actually took place about the times predicted. The difficulty of observing very small eclipses with such instruments only as the Chinese possessed, can be readily appreciated by practical observers. Schall attributes negligence to the observers, which may be true; but it is not improbable that motives of state policy might sometimes be an inducement to ignore an eclipse. There are probably a good many errors in marking the months; which is not surprising, when we consider how many ages the records must have been handed down by manuscript transfers, before the art of printing was introduced.

Altogether we have here a catalogue of eclipses of obvious utility to the historian, and probably not without their value to the man of science; and although the number of errors is naturally very considerable, yet there are so many counter-checks, that at the expense of a little time and care almost any of them may be rectified.

NOTES ON THE ECLIPSE, &c. MENTIONED IN THE SI-YU-KI.

In the narrative of Kiu Ch'ang-ch'un's journey, page 22, we read:—"On the 1st of the 5th month, 1221, at noon, an eclipse of the sun happened, while we were on the southern bank of the [Kerulun] river. It was so dark that the stars could be seen, but soon it brightened up again." We find the following allusion also to the same event, on page 39:—"There was also an astronomer, whom the master asked about the eclipse, which had happened on the 1st of the 5th month. The astronomer said: 'At this place (Samarcand) between 7 and 9 o'clock in the morning it was at its greatest, when six-tenths of the sun was eclipsed.' The master then remarked, that he observed the same eclipse on the river *Lu-kü* [Kerulun], and just at noon it was total; but that, when he arrived in his journey to the south-west, at the *Kin-shan*, the people told him, that at that place the eclipse was at its greatest at 10 o'clock in the morning, and seven-tenths of the sun was eclipsed. Thus the same eclipse was seen at different places in different aspects."

In the above extracts, while there is a want of precision, such as we might expect from a writer who had not made a special study of astronomy, and whose record made no pretension to scientific detail; yet the incidental mention of the facts that he gives, are interesting in themselves, and, as we shall see, give a stamp of authenticity to the whole narrative.

Now we find by calculation, there was a solar eclipse on May 23rd (old style), 1221, central at about 3h. 45m.* civil reckoning at London; the moon's distance from the node being a little over three degrees and a half. The longitude of Samarcand is east from Greenwich, say 66° 59′, which turned into time gives 4h. 27m. 56s. Add this then to the London time 3h. 45m., gives 8h. 12m. 56s. as the time of central eclipse at Samarcand. The Chinese text is 中辰時食至, *i.e.*, "The centre of the eclipse was at mid-*chin*." The hour *chin* extends from 7 to 9 a.m., so that mid-*chin* is actually 8h. a.m.; but the text does not by any means imply a rigorous exactitude to minutes; nor is it at all a forced interpretation, to give our result of 12 minutes and 56 seconds past 8 in the morning as fairly within the meaning of the text.

Again we find Ch'ang-ch'un says:—"When he arrived in his journey to the south-west, at the Kin-shan [Altai mountains], the people told him that at that place the eclipse was at its greatest at ten o'clock in the morning." The Chinese text is more vague however. It is 巳時食至, *i.e.*, "the eclipse was at its greatest during the hour *sze*." The hour *sze* extends from 9 to 11 a.m. and any time within these limits will agree with the text. From such *data*, and considering the great extent of the Altai range, it is very difficult to determine the spot where Ch'ang-ch'un got his information. In the course of the narrative, the diarist notes that they arrived at the north-eastern side of the Altai on the 15th day of the 8th month; and says they

* The error does not exceed a few minutes; and for our present purpose the numbers may be assumed correct.

stopped there for some time. This we may suppose to have been the place, if we could determine its position. The Chinese text of the *Si-yu-ki* has a note appended by Tung Yew-ching, a native scholar, who gives the position as N. lat. about 48° and E. long. about 88°. This would be in the neighbourhood of Cobdo, a not unlikely place, which we may accept *faute de mieux*. 88° is 5h. 52m. in time, which added to the time at London, 3h. 45m. gives 37 minutes after 9 in the forenoon, as the time of the middle of the eclipse at the Altai, and quite in accordance with the Chinese text.

In the record of the personal observation of the phenomenon by Ch'ang-ch'un's party, it is said that the eclipse was seen at noon, while they were on the south bank of the river Kerulun; and from the fact that the stars were visible, we may infer it was total, which Ch'ang-ch'un himself declared to be the case, when he was at Samarcand. In order to vindicate the literal accuracy of this statement, the point of observation must have been in E. long. 123° 45m. which is clearly too far east; as the party was then on the south bank of the Kerulun, to the west of the great lake Kerulun; the debouchure of the river into the lake being about 116° 30′. We must, however, remember, that portable time measures in those days were almost unknown, or were of the very rudest description; and it is highly improbable that our travellers were provided with any instruments of this kind while on the journey. We may well believe then that they could not really tell within half an hour or more of the exact time. Let us suppose them at the time to have been in E. long. 116° 15′, which is quite possible and even probable; they would then have seen the eclipse central half an hour before noon, and in the absence of any standard of measurement, might very easily consider it noon and record it as such. An allowance is also to be made for the time during which the sun was under total eclipse; as it is not said to be central but total at noon.

To shew that May 23rd was identical with the 1st of the 5th month, reference may be had to the 80-year table of the sexagenary cycle* which has been composed for this purpose. By this table we find the 1st of January, 1221, corresponded to the term 壬戌 *jin-seuh*, the 59th of the cycle. The same term would consequently recur on May 1st. Following up the table for 22 terms further brings us to 甲申 *kea-shin*, the 21st of the cycle, corresponding to May 23rd of the Julian calendar. Referring next to the *Kin-she*, or "History of the Kin Dynasty," book xvi, fol. 7, under the year in question, is the record, 五月甲申朔日有食之, "On the 1st of the 5th month, being 甲申 *kea-shin*,—or the 21st of the cycle,—there was an eclipse of the sun." The same statement is repeated in book xx, fol. 5. We have it again in the same terms in the *Hung-kien-luh*, book xcvi, fol. 21, another of the national histories. One other particular of this eclipse is furnished by the History of the Sung dynasty, which dynasty was contemporary with the Kin. We learn from that, that the sun was in

* See *Chinese Recorder and Missionary Journal*, vol. v., P. 103; Observations on Comets, by John Williams, F. S. A. Appendix B.

the constellation 畢 *peïh* at the time of the conjunction. Now we find that the date in question, May 23rd, 1221, was 65 days from the vernal equinox, equal to about 66 degrees. *Peïh* is the 19th of the 28 zodiacal constellations, and extended at that time from about the 56th to the 73rd degree of right ascension; so that at the time of the eclipse the sun was actually in about the 10th degree of *peïh*. Thus we have a harmony of all the data with the facts, and Ch'ang-ch'un's narrative is in perfect agreement with the national histories.

Since the above was written, reference has been made to Gaubil's list of eclipses,* in which this is recorded under the year 1221, with the official note that it occurred on the 1st of the 5th month,—and the calculation of a native astronomer Hing Yun-lou, who using the Yuen dynasty tables, concludes that the eclipse had begun at sunrise,—an obvious error.

On page 22 we read, that after following the course of the Kerulun for sixteen days, Ch'ang-ch'un came to a bend in the river, where he turned off to the south-east and struck the post road from *Yu-rh-li* to Caracorum. Ten days more brought them to the summer solstice at a place where the shadow of the gnomon measured 3 feet 6 or 7 inches. This indication may assist us in determining the position of the travellers. Taking 3 feet 6½ inches,—the mean of the two figures given,—as the shadow of an 8 foot stile (the standard used in China from time immemorial), we have the sun's altitude 66° 7′, which must have been in latitude 47° 21′. According to this it is probable they were south of the southern bend of the Tura river, somewhere about E. long. 107°, in the site of the present Tsetsen Tuchetu khanate; and as four stations farther to the north-west took them across a river, that was doubtless the Karuha.

On page 36, the diarist of Ch'ang-ch'un's journey, after mentioning a city built of red stones to the south of the river Talas, says:—"Passing over a stone bridge, and travelling five days along the south-western mountains, we arrived at the city of *Sai-lan*. There is a small tower in Sai-lan. The ruler, a Mohammedan, came to meet us, and directed us to our lodging. During the first days of the 11th month much rain fell. The 4th of the 11th month (November 20th) was the new year of the country people. They were walking in parties congratulating each other."

The above extract furnishes an incidental evidence of the reliability of the narrative. Even if the writer had not indicated the fact, we know from history that the city of Sairam was at time inhabited by a Mohammedan population; but he says explicitly that the governor of the city was a Mohammedan; and it is quite in harmony with the tolerant spirit of Tchinguiz khan in matters of religion, that the remaining inhabitants were allowed to retain their Mohammedan customs without interference. The Mahommedan calendar dates from July 15th, A.D. 622. The year consists of 12 lunar months of 30 and 29 days alternately, with an intercalary day added

* "Observations Mathematiques, Astronomiques, Geographiques, Chronologiques, et Physiques," par Etienne Soucict, tome iii, p. 354.

to the 12th month at intervals of two and three years, making 11 intercalary days every 30 years. It is easy to calculate any year from these data; but Mr. Sédillot has published a table of the first day of each hegiral year up to A.D. 1882. From this table we see that the first day of the hegiral year 618 was Thursday, February 24th, A.D. 1221.* Consequently the 1st of the Mohammedan (or hegiral) 10th month,—which was the Chinese 11th month,—would be November 16th. But the narrative says they held the yearly festival on the 4th of the (Chinese) month. How was this? To understand this, it must be remembered, that the Mohammedans were accustomed to determine the first day of the month, not by astronomical calculation, but by the time of the first appearance of the new moon. It must be remembered also, that the Mohammedan day, like our astronomical day, began at noon. The new moon would be invisible on the first and probably the second day after conjunction; and we may suppose they first got a sight of it on the evening or night of the third day; so that the 1st day of the popular month would begin on the Chinese (or true) 4th day (November 20th) at noon. The Chinese text is 傍午·相賀, "Just about noon they passed mutual congratulations." The sight was one which must have vividly recalled to the minds of the Chinese travellers the new-year custom of their native country. In Milne's *Life in China*, p. 416, is a translation of a Chinese Mohammedan almanac, in which the 10th month (Shawal) has the following note:—"The whole month is a festival of congratulation." The Chinese scholar Tung Yew-ching, quoted above, remarks that the 9th month ends with a day of fasting; and we see by Mr. Sédillot's tract, that the 1st day of the 10th month is a fixed festival, entitled the "Fête of the Great Beïram," *i.e.*, the conclusion of the first *A'id-al-fethr*. Thus the passage in question,—which at first sight looks incongruous,—is in perfect harmony with the facts of the case.

* Tratic du Calendrier Arabe, p. xxiv.

LIST OF FIXED STARS.

By Mr. A. Wylie.

The following list is drawn out from a comparison of the Maps of the "Society for the Diffusion of Useful Knowledge," with a Chinese Atlas executed by 錢維樾 Tseen Wei-yue, a native of Woo-seih. A revision of the native charts was published by Verbiest in 1674, who determined by observation 24 of the constellations, numbering 335 stars, to which he added 597 new stars. He also added 23 south circumpolar constellations, containing 150 stars. To these 16 more constellations, containing 90 stars and 1614 supplementary stars were added in the Catalogue from the observations of Ignatius Kegler and André Pereira, about the middle of the 18th century. The catalogue in the Imperial Thesaurus, *Lieh-seang-k'aou-ching*, comprises 300 constellations, containing 3083 stars. From that authority, Tseen Wei-yue has given a complete chart of the sphere in 26 plates, after the model of the *Ta-tsing-hwuy-teen*, reducing the places of all the stars for 1839, the year of publication. The character 增 implies that a star is one of those added by the Europeans.

In the present list the stars are given consecutively, according to the letters of the Greek alphabet, followed by the Latin alphabet. After these, the simple numerals—as 2—indicate the numbers in Flamsteed's Catalogue, as published in 1835. Those within parentheses—as (41)—are according to Piazzi's Catalogue, published in 1814. Those within brackets—as [557]—are from Lacaille's Catalogue of 1753. Those within single inverted commas—as '1'—are from Hevelius. Those within double inverted commas—as "419"—are from Sir John Herschel's Catalogue of Nebulæ in the Philosophical Transactions. Where the Arabic is followed by a Roman numeral,—as 153. I—they are from Sir William Herschel's Catalogue of Nebulæ in the Philosophical Transactions. Where the numeral is followed by the letter M.—as 34. M.—they refer to Messier's Catalogue.

11	左旗增九	
15	左旗增十	
	Antinous.	
θ	天桴一	
ι	右旗五	
κ	右旗八	
λ	天弁七	
f	天弁增五十	
k	右旗增七	
42	右旗桴二	
62	天桴增一二	
64	天桴增一二	
66	天桴增一二	
(109)	右旗增九	
(143)	右旗增八	
(181)	右旗六	
(210)	右旗增六	
	Antlia Pneumatica.	
ζ	天記增三	
	Apparatus Sculptoris.	
(111)	火爲一	
	Apus.	
α	翼雀八	
β	翼雀二四	
γ	翼雀	
δ	翼雀六	

45	奎宿增十六七	
47	奎宿增十六七	
50	天大將軍三二	
51	天大將軍軍增八	十一
54	天大將軍軍增	
55	天大將軍軍	九十
56	天大將軍七	
58	天大將軍八	
59	天大將軍九十	
63	大陵增	
64	大陵增	
65	大陵增	
66	大陵增	
(41)	天大將軍增	十四
(89)	天大將軍增	十八
	Anser.	
1	齊增三	
2	齊增四	
3	齊增八	
4	左旗增	四
5	左旗增	五
6	齊增五	
7	左旗增	六
8	齊增六	
9	左旗增	七
10	左旗增	八

i	奎車	七
2	胵	十六
3	胵蛇	四
4	胵蛇	二十
5	胵蛇府	七
6	車胵蛇	八
7	胵蛇	七
8	胵蛇	六
9	胵蛇	三
10	胵蛇	八
11	胵蛇	五
12	胵蛇	九
13	胵蛇	十
14	胵蛇	十
15	胵蛇	二
17	胵蛇	十
18	胵蛇	十
22	胵蛇	十一
23	天奎	一
28	奎宿	二
32	奎宿	十
33	奎宿	二
36	奎宿	二
39	奎宿	宿
41	奎宿	宿
44	奎	宿

	Andromeda.	
α	壁奎二	
β	奎宿九	
γ	奎宿大將軍一	
δ	奎宿宿五	
ε	奎宿宿四	
ζ	奎宿宿一	
η	天胵蛇一	十一
θ	胵蛇宿二	十九
ι	奎宿宿八	
κ	奎宿大將軍	二
λ	天車府宿	十六
μ	奎天大將	六
ν	天軍奎	七
ξ	天軍天	五
ο	天胵天	十
π	天軍天	四
ρ	天軍天	軍
σ	天軍天	軍
τ	天胵天	軍
φ	天天	十
χ	天天	十
ψ	天天	十
ω	天天	十
A	天天	二
b	天天	二
c	天天	三

α β γ δ ε ζ η θ ι κ λ μ ν ξ ο π ρ σ τ φ χ ψ ω A b c

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Corvus.

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三三一　八九七　四五六
十十十　十十十　十十十
一一三、二　三三三三三二二　二二二三　二一
16 增增二增　增增增增增增增四　增增增增二增增二一
17 道臺道臺　宿宿宿宿宿宿宿瀆　宿宿宿瀆瀆瀆瀆瀆　邸
30 轑漸轑漸　參參參參參參參四　參參參四四四四四　關
(283) *Microscopium.*
η 玦　三二四
(17) 九玦　
(1717) 九玦　
Monoceros.
1 參　
2 參　
3 參　
4 參　
5 參　
6 參　
7 參　
8 參　
9 參　
10 參　
11 參　
12 參　
13 參　
14 參　
15 參　
17 參　
18 關　

五　六　七二五　一　二　四四三六五二一
增三增四增增增　一二三增一二三增三四增增增增增增一
昌幰昌幰台昌階　女臺臺臺臺女女道道臺女臺女臺臺女女道
文軒文軒上文內　織漸漸漸漸織織轑轑漸織漸織漸漸緲織轑

Lyra.

37 *α*
38 *β*
39 *γ*
40 *δ*¹
41 *δ*²
44 *ε*
(311) *ζ*
η
θ
ι
κ
λ
μ
*ν*¹
*ν*²

5
7
13

二五七　八三三二五一九
十十十　十十十十十十十
二二二二三三三三三三三三　二一　十九十三三二一四八五六
3 增增增增增增增增二二增增增增增增增增增增增增增增增
4 穀穀穀穀穀穀穀穀穀穀旗幰階階旗旗階台台台幰台台
5 八八八八八八八八八座軒內內座座座內上上上上軒上上
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四一三六一二一三　將五七九八二三四一增二增一
官官車官騎卒卒柱陣官官官騎騎柱頓頓頓官官官官
騎騎陣騎車積積南騎騎騎騎車車南頓頓頓從從從騎
β　*γ*　*δ*　*ε*　*ζ*　*η*　*θ*　*ι*　*κ*　*λ*　*μ*　*ο*　*π*　*ρ*　*σ*　*τ*　*φ*¹　*φ*²
1　3　4　5

軍

[1283] *Lynx.*
1 增　穀　一十
2 增　穀　十六
八

三一　　三四
增增五五五三四三增一一一二三四增增一一七二
正江樓籥增增增籥正籥人人人人人人肆增籥籥
宗天市天候候候天宗天宗宗宗宗車候天天
41　　　　　　　　　　　　　　　　　　　　*Orion.*
43　　　　　　　　　　　　　　　　　　　　四七五三二
47　　　　　　　　　　　　　　　　　　　　宿宿宿宿宿
52　　　　　　　　　　　　　　　　　　　　參參參參參
53　　　　　　　　　　　　　　　　　　　　α β γ δ ε
54
56
58
61
63
66
67
68
70
73
74
(58)
(85)
(117)
(197)

二三四二四增一　　一　　二十一
咸咸咸江江籥籥二肆肆宿肆宿肆肆肆江江增肆江者者者者江
東東東天天天天斛列列心車列車天天宗車天宦宦宦天
χ ψ ω A b c^1 c^2 k
12
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26
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四三六二七　一一九十　二十一
增增增增增二增增增二增增一增二四增
梁楚韓宋　燕七
垣垣垣垣三　二一垣增一增增三增一
市市市江一二肆樸市江江宿正樸肆咸
天天天斛斛列市天天心宗市車東
四二　三
四五三二　　*Ophiucus.*
尾雀尾尾　侯宗宗天天天天斛列列心車列車天天宗車天宦宦宦天
蛇巽蛇蛇　
[1801]　α β γ δ ε ζ η θ ι κ λ μ ν ξ π ρ σ τ υ φ

Octans.
α β ν

Musca.
α
β
γ
δ
33
35
39
41
[1037]

Norma.
ε

19
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21
22
23
24
25
26
29
30
31
(151)
"419"

四五　三二一六七一
增增二增增增增增一二增一　五
邱邱邱邱邱邱廚廚廚廚濱
關關關關關關關外外外外四
蜜蜜蜜蜜胃胃胃胃海
蜂蜂蜂蜂宿宿宿宿宦　五
增一二三六
宿　二增
尾

一 一 二 二
一増五四三二増増 一二一三一四二 六
雀雀雀雀雀雀雀雀 宿宿宿宿電宮宿三二宮宮宿電宮増二三一 二増
孔孔孔孔孔孔孔孔 室室壁危雷離危曰曰離離危雷離杵杵雷

Pegasus.

[1500] θ κ λ ν π ω

α β γ ε ζ η θ ι κ λ μ ν ξ o^1 π^2 ρ

二 四二一
十 七十十九十
増 十三二十二五六六七八四五六七七
宿一増宿宿宿宿増増増増増増増増増
參伐伐參參參參參司司水水水四四四參參

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78
(84)
(321)

Piscis.

十一
十七十六九八
雀雀雀雀雀雀雀
孔孔孔孔孔孔孔

α β γ δ ε ζ

四 一五 五七
増 六十二六十
怪怪宿宿宿宿宿府府旗旗旗宿宿旗旗旗旗宿宿宿宿宿宿宿
司司參參參參參參水水參參參參參參參參參參參參參參參參參

χ^3 χ^4 ψ^1 ψ^2 ω A b d e f^1 f^2 g h i n^2 p

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11
13
15
18
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22
23
31
32

一 三
宿宿増二 六一増一二一二六五七四八九増増四増二三四増 三
參參伐伐伐參幣參水水參參參參參參參參參參參玉參觜觜司司 十六

ζ η θ^1 θ^2 ι κ λ μ ν ξ o^1 o^2 π^1 π^2 π^3 π^4 π^5 π^6 ρ σ τ υ ϕ^1 ϕ^2 χ^1 χ^2

十三

四一 七一三五 六 四
舌般陵陵水船舌舌尸陵般陵陵般陵水般般般車舌大陵陵
卷天大大大積天卷卷卷積大天大大天大積天天天五卷天大大

十六
增十九
軍三十

ζ η θ ι κ λ μ ν ξ ο π ρ σ τ χ ψ ω A b¹ c d e f g h l

十八
一
六三六 增增增將增增
六增二增四增增八六增增增將增增

六 七八 七二一七八五三四七六八五十十八
增 五 增增六增增增增增增增增增增增增增
宮電宿宮電宮宿宿電電蠶宿宿宿宿宿宿宿電
離雷室離雷離壁壁雷雷霹壁壁霹壁壁壁壁雷

65 66 67 69 70 71 72 73 75 76 77 78 79 80 82 83 85 86 87 212.III

Perseus.

α 天船三五二五二
β 大陵陵船船舌
γ 大天天卷
δ
ε

25 四 五 一 一一二二三 二三四五一一 二三五四三四五六
28 五 增 吏 增增增吏增二增增增增增增增增增增增增增
30 增增宿公四 宮墓墓公墓增宮宮宮增增增四增增增增增
31 曰曰危土曰離墳墳土墳杵離離離室雷雷室雷雷雷室室室
32 33 34 35 36 37 38 39 40 41 45 51 52 55 56 57 58 59 60 61 63 64

σ τ υ φ χ ψ d

1 三五六增增增二 一二 三七
2 電宮宮宿宿祿二 增增三增增
3 4 雷離離壁壁壁司人人危危人危危人司人人曰曰曰危危危杵
5 7 8 9 11 12 13 14 15 16 17 19 20 21 23
九 九十六 一 四一二三增增增增 一 十八十九 一

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32	增	三十一
33	增	六七二九八二十二
34	垣	相垣垣宿相宿相相轅轅
35	垣	垣臺垣垣宿相相轅轅
36	靈	長長長翼天翼天天軒軒
37	長	長翼天天軒軒
38	長	翼天天軒軒
39	翼	天天軒軒
40	天	天軒軒
41	天	軒軒
(6)	軒	軒
(77)	軒	軒
(222)	軒	軒
(235)	軒	軒

Taurus.

α	畢	五五
β	畢	五四
γ	畢	三增
δ^1	畢	二十
δ^2	宿	宿二
δ^3	宿	宿一
ε	關	
ζ	宿	六六
η	宿	增
θ^1	畢	十三
θ^2	畢	

Sextans.

2	增	四十六
3	增	四十八
4	增	十四十一
5	增	十九四十二十七
6	增	四十四四十二十九
7	增	四十四三五五十九二三
8	增	增
9	增	增
10	增	增
11	增	增
14	增	增
16	增	增
17	增	一
18	增	增
20	增	增
21	增	三
22	增	增
23	增	增
24	增	四九
25	增	增
26	增	增
27	增	增
29	增	增
30	增	增
31	增	增

| | | |

| | | |

三七八　二　　一增　一
增增增三增六二四增守三七增增增增
璇璇璇牢牢牢牢牢陽埋陳轆轤廚　陽增增增師理昌理理
42 天天天天天天天天太天常天天內輔開輔輔輔三天文天天
43 44 47 55 56 57 58 59 60 66 67 70 73 74 76 81 82 83 84 86 (26) (56) (126) 837. II. 840. II.
增增增增

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25 左旗増二十二
26 天津増二十一
27 天津増二十
28 天津増二十二
29 瓠瓜五
30 天津増二十三
31 天津増二十四
32 天津増二十五
33 八増一
35 天津増二十七
(23) 八増二
(151) 天津増二十六

613. III. 進賢一
Vulpecula.
12 左旗増十八
13 左旗増十七
14 左旗増十九
16 左旗増十六
17 左旗増十二十
18 左旗増十三
19 左旗増十四
20 左旗増十五
21 左旗増十一
22 左旗増十二十三
23 左旗増十二
24 左旗増十一

96 宿増三
97 宿増四
101 宿池一増六
104 宿増五
106 宿増九
108 宿増十
109 宿増二十七
110 氐九
(23) 垣三次将増二
21. II. 左五諸侯四
122. II. 九卿二
128. II. 公一
13. III. 卿増七
108. III. 九三

70 増一二
71 将増
73 将十一
75 上将十六
78 上増
80 垣垣一増五
83 垣門門増七八
85 門門田宿増七
86 門門宿増増七
87 門門増増十九
89 田宿増五
92 宿増一二
94 宿増
95 天天角天天六

ASBESTOS IN CHINA.

The fact of a fibrous stony substance having been woven into cloth and applied to various uses in domestic economy by the ancients, is well attested by history. The existing specimens of cloth made of this substance, known as asbestos, remove every ground of doubt as to the veracity of the older annalists. The Danish historian Worm, who lived during the first half of the 17th century, states that the making of cloth from asbestos was a thing totally unknown in his time; but the Italian, Batista Porta, who died in 1615, declares that the spinning of this material was then known to every one in Venice. In No. 273 of the Philosophical Transactions, a description is given of the method of preparing the substance for weaving.* The various references to the use of this by the ancients contained in the Greek and Latin authors are well known, and may be seen in Smith's Dictionary of Antiquities and other works; but it is not so well known that kindred records are found in Chinese books, both ancient and modern. The writer of this having lately received a piece of fire-proof cloth, brought from Thibet to China, and apparently of recent manufacture, has been induced to examine the native works, from which a few passages are selected respecting this article. According to European accounts, the asbestos of the ancients was obtained from India, or the islands in the Mediterranean. The material spoken of in Chinese books as 火浣布 *Ho-hwán-poo*, "Fire-proof Cloth," † there is reason to believe is identical. This is not said to be an indigenous product, but is generally mentioned in ancient times as tribute brought from a foreign land.

* Chambers' Dictionary of Arts and Sciences.

† *Ho-hwán-poo* is literally, "Cloth which is purified by fire," but "fire-proof cloth" may be used as a convenient synonym.

The earliest allusion is by 王子年 Wang Tsze-nien, an author about the middle of the 4th century, in his 拾遺記 *Sheh-e-ke*, "Record of Gleanings,"* and reaches back as far as 2,200 years before the Christian era, about which time it is said the people of 羽山 Yu-shan brought a presentation of yellow cloth to the Emperor Shun. This is not very distinct, but as we learn from the same authority that the same nation on two later occasions brought offering of fire-proof cloth, it is no unfair inference to suppose that the former offering was of a similar character. 列子 Lih-tszè, a Taoist writer, who flourished at the close of the 5th century B. C., has the following passage in his paper entitled 湯問 *T'ang-wún*, "Tang's Questions":† "When 穆王 Muh-wang, of the Chow dynasty (about 1000 B. C.), fitted out a great expedition against the Western 戎 Jung, the latter presented an offering of a Kwan-woo sword and some fire-proof cloth. The sword was one foot eight inches in length, a red blade of choice steel, and would cut jade stone like clay. The fire-proof cloth was cleansed by being thrown into the fire, when the cloth became the colour of the fire and the dirt assumed the colour of the cloth. When taken out of the fire and shaken it became white as snow."

This circumstance is again mentioned by 東方朔 Tung Fang-so, in a semi-fabulous work called 十洲記 *Sheh-chow-ke*, "Record of the Ten Islands," about the end of the 2nd century B. C., who also states in the same place,‡ that the king of a country in the west sent an envoy to the court of 武帝 Woo-ti, of the Han, in the 4th month of the year 114 B. C. with an offering of four ounces of a famous cement and a bright hair cloak. The emperor not knowing the extraordinary properties of these articles caused them to be put in his depository. The hair cloak was of a yellow colour; when left in the water for several days it did not sink; although put in the fire it was not scorched. When the emperor was made aware of this he expressed his acknowledgment to the envoy, and sent him back with gifts of various articles which were rarities in his own country.

* Boek 9, p. 4.
† Last page.
‡ Page 5.

We learn further that the Yu-shan nation sent an offering of red cloth in the time of 桓帝 Hwan-ti, of the Han (A. D. 147-167), whose general, 梁翼 Leang-ke, had a single garment made of it.* This he was in the habit of wearing when there happened to be a great assemblage of guests, on which occasions he would insist on declining the wine cup till it got spilt on his dress, and then pretending to be annoyed took off his robe and ordered it to be thrown in the fire. It blazed up as if it were reduced to ashes; but the stains being removed, and the fire extinguished, the cloth appeared bright and clean as if it had been purified with lees.†

The next account we have of the fire-proof cloth being brought as tribute, is in the second month of the year A. D. 239, in the time that China was divided into three kingdoms, when some foreigners from the Western regions brought an offering of the article to the court of 齊王 Tse-wang, of the Wei, and were introduced by double interpreters. The emperor directed his great generals and military officers to put it to the test and exhibited it to all the officers.‡

The *Sheh-e-ke*§ mentions another embassy from the Yu-shan country to 武帝 Woo-ti, of the Tsin, in the year 280, which brought an offering of fire-proof cloth. The event was noticed as having been preceded by a phenomenon in the heavens of a remarkable character. The envoys stated that the hills in their country contained a veined stone which ignited, and from which the appearance of smoke was visible all the year round. This was called the cleansing fire; and when dirty garments were thrown on this fire stone, although they contained an accumulation of filth, they were made as clean as new.

Again, in the year 380 天竺 *T'ĕĕn-chŭh*, "India," presented an offering of fire-proof cloth at the court of 秦 Tsin.‖

The 四公記 *Sze-kung-ke*, "Record of the Four Dukes," a book of the Leang dynasty (502-557), gives the following state-

* *Sheh-e-ke*, book 9, p. 4.

† The preceding is from Foh-tszè, who flourished about the lat er part of the 4th century.

‡ *San-kwo-che*, "History of the Three Kingdoms," book 4, p. 1.

§ Book 9, p. 4

‖ *Shĕh-lŭh-kŏ-chun-tsew*, "Annals of Sixteen Kingdoms," Book 37, p. 11.

ment:—"Some merchants from the southern ocean brought three pieces of fire-proof cloth as a present, which the emperor had deposited among the miscellaneous cloths. Having sent Duke 杰 K'ëë on some other business, on coming to the place where the cloth was kept, the Duke recognizing it at a distance, said, "This is fire-proof cloth; two pieces are manufactured from the bark of a tree, and one is made of woven rat's hair." On making enquiry of the merchants their statement exactly agreed with that of Duke K'ëë. On asking him the difference between that of the tree and the rat the Duke replied, "That made of bark is stiff, while the hair is pliable, by which they may be distinguished. Take some wood cut down on the north side of the hill and set a light to it by means of a solar speculum; the character of the bark will then become changed." On trying this it was found to be true."

A quotation in the 格致鏡原 *Kŏh-che-king-yuen*,* "Mirror of Science," states that the foreign merchants who came to trade on the south of the mountains, are in the habit of bringing fire-proof cloth; the writer remarking that he has seen it, that it is of an ash colour, but he did not ask whether it was made from the bark of a tree, or the hair of a rat.

These circumstantial details are sufficient to establish the fact of fire-proof cloth having been known in China from an early period. The speculations of native writers, as to the material of which it was made, will probably not be thought equally worthy of credit with the bare recital of facts which came under their notice. In early times they appear not to have suspected that it was a mineral product, but have contented themselves with applying to the animal and vegetable kingdoms respectively for a solution of the difficulty. The following apocryphal narration by Tung Fang-so, in his *Sheh-chow-ke*,† seems to be the origin of many groundless statements by succeeding writers:—"炎洲 *Yen-chow*, "Burning Island," is a place in the southern ocean, 2000 *li* square. The distance from China to the northern side is 9,000 *li*. On this island is the wind vivifying animal, which resembles a leopard of a blue colour, about the size of a fox. It is taken in a net, and although exposed to the fire with several loads of fuel,

* Book 27, p. 25.
† Page 3.

when the fuel is completely consumed the animal stands out from the ashes unburnt, without even having its hair scorched. It is impervious to hewing or piercing, and when struck it is like a sack of ashes, but it is put to death by giving it several tens of blows on the head with a hammer. If it opens its mouth towards the wind, it comes to life again in an instant, but if its nostrils are stopped, with some rushes taken from the rock, its life becomes extinct. An elixir is made of its brain mixed with the Chrysanthemum Indicum, which insures 500 years of age to those who eat ten pounds of it. There is also the fiery forest hill, on which there is the fire lustre animal, about the size of a rat, with hair three or four inches long, sometimes red and sometimes white. The hill may be about 300 *li* in length; on a dark night the forest is visible from the reflection of the animal's lustre, like the light of fire. The hair of this animal is woven into cloth, which makes what is called fire-proof cloth. When the clothes of the natives are dirty they cleanse them with a solution of ashes, but if that fails they put them into the fire during the time occupied eating two bowls of rice, and being then shaken, the dirt falls off, leaving them white as snow."

The following is from the 神異經 *Shin-e-king*, "Book of Marvels,"* another work by the same author as the preceding: "Beyond the southern desert, is a burning mountain, forty *li* in length and five or six *li* in breadth. This mountain produces trees unconsumable by fire, among which there is a fire rat, a hundred pounds in weight, with hair more than two feet in length, and as fine as silk. It ordinarily lives in the fire, and is of a deep red colour; but sometimes it comes out, and its hair is then white. It is put to death by being sprinkled with water, when the hair is spun and woven into cloth for use. If the cloth gets soiled it is put into the fire for purification, which renders it quite clean."

A passage in the 太平御覽 *Tae-ping-yu-lan*, "Tae-ping Imperial Observer,"† which professes to be a quotation from the 搜神記 *Sow-shin-ke*, "Records of Investigated Wonders,"‡ a work written by 干寶 Kan Paou, about the commencement of the 4th century, is as

* Pages, 6, 7.

† Book 820, p. 9.

‡ The passage is not to be found now in the printed copies. It was probably taken originally from an older manuscript edition.

follows:—"Within the precincts of the Kwan-lun (Himalaya) mountains, is a burning fiery hill. On the hill there are beasts, birds, plants and trees, which all thrive in the midst of the fire; hence fire-proof cloth is either a texture made from the bark of the plants and trees on this hill, or else from the covering of the birds and beasts." The 異物志 *E-wŭh-che*, "Memoirs of Marvels," has the following remarks on the same subject:—"In the 斯調 Sze-teaou kingdom there is a burning island, on which there is a plain of fire, which lights up spontaneously in spring and summer and dies out during autumn and winter. There are trees growing on it which do not waste; the branches and bark renewing their fresh appearance; but in autumn and winter, when the fire dies out, they all wither and droop. It is customary to gather the bark in winter for the purpose of making cloth. It is of a slightly bluish black colour. When it is dirtied or soiled it is thrown into the fire again, and comes out fresh and bright."

The 發蒙記 *Fa-mung-ke*, "Tutor's Record," quoted in the *Kih-che-king-yuen*, remarks that, "there is fire rat cloth in the Western regions."

The 玄覽 *Huen-lan*, Delicate Observer, also quoted in the same work,† says:—"In 毗騫 Pe-k'ëën there is a burning island, producing a tree, the substance of which can be woven, and makes what is called fire-proof cloth."

The 山海經 *Shan-haè-king*, "Hill and Ocean Classic,"‡ a work allowed by the most judicious critics to be several centuries older than the Christian era, has the following passage:—"Beyond the Kwan-lun mountains is a burning mountain, upon which any object that is thrown is immediately burnt."

郭璞 Kŏ Po, who wrote about the end of the third century, A. D, in his commentary on the above says:—"Ten thousand *li* to the east of 扶南 Foo nan (Siam) is the kingdom of 耆薄 Ké-po. More than five thousand *li* farther east is the burning mountain kingdom, where, although there may be long continued rain on the mountain, the fire constantly burns; there is a white rat in the fire, which sometimes comes out to the side of the mountain, in order to

* Book 27, p. 23.
† Book 27, p. 24.
‡ Section 16.

seek food, when the people catch it and make cloth from the hair, which is what is now called fire-proof cloth."

A more recent commentary on the same passage has the following extract from the 大清一統志 *Ta-tsing-yih-tung-chí*, "Geography of the Ta-tsing Empire":—"In the 自然州 *Tsze-jen-chow*, 'Spontaneous Combustion Island,' there is a tree which grows in the fire, the bark of which, when woven, makes fire-proof cloth. Fire-proof cloth is of two kinds, of which this is one."

The 述異記 *Sheh-e-ke*, "Record of Wonders,"* by 任昉 Jin Fang, who lived towards the end of the fifth century, has the following note:—"There is a burning mountain in the south, which is ignited all over, but the fire goes out in the 12th month; after the fire is extinguished the plants and trees all put forth branches; but when the fire lights up the leaves drop off, the same as winter in China. When the wood is used for fuel it is not consumed by burning. The bark, when woven, makes fire-proof cloth."

The 玄中記 *Huen-chung-ke*, "Exquisite Middle Record," quoted in the *Kih-che-king-yuen*,† says:—"In the south there is a burning mountain; this mountain produces a tree which is used for fuel without being consumed; the bark, when woven, makes fire-prooof cloth, of which there are two kinds."

The 野客叢書 *Yay-kih-ts'uy-shoo*, "Rustic's Repository,"‡ by 王楙 Wang Mow, an author during the Sung dynasty, has the following:—"I have seen a miscellaneous statement respecting fire-proof cloth, which said that 'some considered it was woven from the bark of a tree, and some declared it to be woven from the hair of a rat; it is uncertain which is correct.' I consider there is foundation for both these statements." On looking over the *Sow-shu-ke* I find it stated that:—"Within the precincts of the Kwan-lun mountains, is a burning mountain, on which there are birds, beasts, plants and trees. If the cloth is not made from the bark of the trees it is made from the covering of the birds." Again, in the Sung Memoirs, by 沈約 Tsun-yo, it is said:—"Burning island is in the southern ocean, and produces the 猞猁 Kĕĕ-keuh animal. When this animal is caught by the people, it cannot be injured by chopping or piercing.

* Book 1, p. 11.
† Book 27, p. 25.
‡ Book 30, p. 12.

Although they make a large fire, bind the animal and throw it into the flame, it remains unscorched. Again the burning mountain country constantly produces fire, which is not extinguished by incessant rain. In the middle of the fire is a white rat. When the forests on burning island are exposed to rain the bark of the trees becomes scorched, when exposed to fire it becomes white. The people of the island collect it in the spring months and weave the bark into fire proof cloth. This cloth may either be made of the bark of the trees, or the hair of the rats."

The 南越子 *Nan-yue-ché*, "Memoir of Southern Yue," quoted in the *Kih-che-king-yuen*, states* :—"In Kwang-chow there is a tree which resists fire. On the north of the hills it is called the Watch-fire; some call it the Guard-fire. It is very much planted on the house tops there as a preventive against fire; but as there is no frost nor snow in the south it reaches the size of a tree."

The same work has next the following quotation from 伏琛齊地記 *Fuh-chin-tsze-te-ke*, "Fuh-chin-tsze's Geography" :—"South-east from the city of 東武 *Tung-woo* there is the fire-conquering tree. There is a plain covered with an inextinguishable fire of burning charcoal; hence Fung Fang-so calls it the unconsumable tree."

The above is followed by a quotation from the 太平寰宇記 *Tae-ping-kwan-yu-ke*, "Tae-ping Universal Record" :—"The unconsumable tree is commonly much used to make arrow heads. When burnt it forms charcoal, but is not reduced to ashes. It is produced at 膠州 Keaou-chow; the leaves are like rushes; they are bound together and used as torches, being commonly called the Ten Thousand-year Link."

Next is a quotation from the 開山圖 *Kái-shan-t'oo*, "Illustrations of Mountain Scenery," as follows :—"徐無 Seu-woo hill produces the unconsumable tree. This tree is black, resembling charcoal, and is without leaves."

The same page has the following quotation from the 輟耕錄 *Chŭe-kang-luh*, "Book of Husbandry" :—"At the Wild Horse River, in the Ouigour country, there is a tree called 鎖銷 So-so. When set alight it burns the whole year round without going out, nor is it reduced to ashes. The native women make caps of the roots, which can be put in the fire without being burnt, like the fire-rat cloth."

* Book 66, p. 12.

The 南史 *Nan-shè*, "History of the Southern Empire,"* written by 李延壽 Le Yen-show, about the middle of the seventh century, has the following passage:—"扶南 Foo-nan (Siam) is bounded on the east by 大漲 Ta-chang (great expanse) ocean; in this ocean is a great island, on which island is the kingdom of 諸薄 Choo-po; east from this kingdom, is the island of 馬五 Ma-woo; east from this more than a thousand *li* across the Chang ocean, is the spontaneous combustion great island. On this island there is a tree which grows in the fire. The people in the neighbourhood of the island peel off the bark and weave it into cloth, of which they make handkerchiefs, the same as 蕉麻 *Tseaou-ma*, "Raw Hemp," of a slightly bluish black colour. When it is the least soiled they throw it into the fire, and it comes out pure and clean. It is also used to make lamp wicks, which never get exhausted."

After making due allowance with regard to the substance spoken of, this last passage remarkably corroborates the statements of ancient classic writers. The Chinese term here translated handkerchief is 手巾 *Show-kin*, "Cloth (or towel) for the hands," exactly corresponding to the Greek χειρεκαγεῖα of Sotacus, and χειρόμακτρα of Shabo, Plutarch and Pliny, who speak of these articles being made of woven asbestos. The last sentence in the above quotation calls to mind the same *asbestos*, meaning "inextinguishable," which was given by the Greeks, who used it for making wicks of lamps, in consequence of its being indestructible by fire. "Pausanias mentions that the golden lamp which burned day and night in the temple of Athena Polias at Athens, had a wick of this substance."† This mineral is said to be applied to the same use at the present day in some parts of the United States. It is difficult to identify most of the places above mentioned, which are said to produce this article. There are some notices, however, more definite on this point.

This 吳錄 *Woo-lŭh*, "Woo Register," quoted in the *Tae-ping-yu-lan*,‡ says:—"In the district of 北景 Peh-king, in Cochin China, there is a fire rat, from the hair of which cloth is made; it is submitted to the fire and then twisted into thread; the fabric being called fire-proof cloth."

* Book 78, p. 7.
† Smith's Dictionary of Greek and Roman Antiquities.
‡ Book 820, p. 8.

Western writers state that asbestos was brought from India in ancient times; hence it was called *linum Indicum*. This agrees with the quotation previously given from the *Shĕh-lŭh-kwŏ-chun-tsew*. We find that it was also obtained from the vicinity of Carpasus in Cyprus; hence it is called by Pausanias *λίνον Καρπασίον*, "the Flax of Carpasius;" and being procured from Carystus in Eubœa. Plutarch terms it *λίθος Καρυστιος*, "the Carystian Stone."* In the following quotation *Ta-tsin* is generally understood to point to the Roman empire, including the countries on the north and east of the Mediterranean sea; so that this furnishes another coincidence, mutually favouring the veracity of both accounts. The passage is from the description of 大秦 Ta-tsin in the 後漢書 *How-han-shoo*, "History of the After Han."† "The land produces gold, silver and curious gems. There is the night lustre gem, bright lunar pearl, fowl startling buffalo stone, coral, amber, glass, pearl-stone, vermilion, blue and azure sapphire, gold embroidered cloth, gold thread tapestry, various coloured damask gilt and fire-proof cloth."

There is a passage to the same effect on the famous Nestorian tablet discovered at Sin-gan, which says respecting Ta-tsin:—"The country produces fire-proof cloth, life-restoring incense, bright lunar pearls and night lustre gems."

The *How-han-shoo*‡ has another passage of a similar character in the account of a nation called the 冉駹 Tan-mang, south-west from China, near the present province of Szechuen; it is as follows:—"Their contributions of tribute cloth, fire flannel, trained birds and huge quadrupeds were all conveyed to the inner magazine." The commentary states that "the fire flannel is fire-proof cloth."

It appears, however, that China had its sceptics in early times with regard to the actual existence of such a substance, as will be seen by the following quotation, which is a commentary on the extract from the History of Three Kingdoms, given above, by 裴松 Pei Sung, published A.D. 429. "In the time of the Han dynasty, at a remote period, there were offerings of this cloth from the Western regions; but during the long interval that

* Smith's Dictionary, etc.
† Book 118, p. 11.
‡ Book 116, p. 13.

elapsed between that and the commencement of the Wei dynasty people came to doubt of its existence. The Emperor 文帝 Wan-ti, considering that the fierce consuming nature of fire was incompatible with the preservation of life, wrote an essay to show the absurdity of the thing, and to warn intelligent people against giving heed to it. When the Emperor 明帝 Ming-ti ascended the throne he issued an edict to the three dukes, saying: 'The maxims in the essay by my imperial ancestor are imperishable.' He caused it to be cut on stone outside the door of the ancestral hall, and also with the lapidary classics in the Grand College, to be a perpetual testimony to coming generations. Upon the occasion in question, when an envoy from the Western regions made an offering of fire-proof cloth, the emperor caused the inscription to be obliterated, when it became a subject of general ridicule. Formerly, returning from the Western expedition, when I came to Lo-yang, I made a general inspection of the antiquities, and seeing that the stone with this essay was still preserved in the Grand College, while it was not to be found outside the door of the ancestral hall, I enquired of the old people, who said that at the commencement of the 晉 Tsin dynasty, when they made use of the Wei ancestral hall, they removed this stone into the Grand College, and that there were not two separate stones set up. I consider this statement to be incorrect."

抱朴子 Paou-po tsze,* a Taoist author, at the beginning of the fourth century, A.D., in an argument against the propriety of making experience the standard of faith, takes occasion to introduce the above circumstance by way of illustration in the following terms:—"Wan-ti, of the Wei dynasty, having examined every subject, and acquired an extensive fund of knowledge, professed to be well informed with regard to every object in nature. He declared that there were no such things in the world as a knife that would cut jade and fire-proof cloth; which opinion he recorded in an essay on the subject. Afterwards it happened that both these articles were brought to court within a year; the emperor was surprised, and caused the essay to be destroyed; this course being unavoidable when he found the statements to be without foundation."

* Book 2, p. 3.

A passage in the 花木考 *Hwa-mŭh-kaou*, "Botanical Investigator," quoted in the *Kih-che-king-yuen*,* informs us that the tree spoken of above is allied to the mineral kingdom. It is as follows:—

"The 圖經 *T'oo-king*, "Illustration Classic," says:—'The unconsumable tree grows at Shang-tang.' It is now to be found among the hills of Tŭh-chow and Loo-ngan. It is of the character of a mineral, of a bluish white colour, resembling rotten wood. When exposed to the fire it does not burn; hence its name. Some call it the soap stone root; for it is produced in places where soap stone is found; the same being also named the unconsumable tree (or wood). There is no particular time for gathering it. Now among the hills at 處州 Choo-chow a species of pine stone is produced, resembling the trunk of the pine, but in reality a stone; some say that the pine in the course of time becomes changed into stone. Many people take it to decorate their mountain lodges, and also shape it into pillows. Although it is not used in medicine, it is noticed here as being of a homogeneous character with the unconsumable wood."

The pine stone alluded to in the preceding paragraph, is probably petrified wood; but there is a passage in the 元史 *Yuen-she*, "History of the Yuen Dynasty,"† by 宋濂 Sung Leen, published in 1369, which leaves no doubt that asbestos is the substance spoken of. It is difficult to identify the hill mentioned here; but as asbestos is said to be found in Tartary‡ it is not unreasonable to suppose a coincidence in this also. The quotation is from the biography of 阿哈瑪特 A-ha-ma-teh‖, a minister who was branded for his treachery. In a memorial to the throne he states:—"'布赫賽 Poo-keh-tse§ hill produces a stone tissue, which is woven into cloth that resists fire.' He requested that an officer might be sent to gather it."

The same fact is also preserved in the Imperial Records, in the same history,¶ where it is said:—"In the 12th month (of the year 1267), on the 58th day of the cycle, the 制國用司 *Che-kwŏ-*

* Book 66, p. 12.
† Book 205, p. 2.
‡ Chambers' Dictionary of Arts and Sciences. Article, "*Asbestos*."
‖ These are the characters given in the revised edition, published during the present dynasty. In the original edition the name is 阿合馬 A-ho-ma.
§ In the original edition this is Pĭĕ-k'ĕĕ-cheh 別怯赤.
¶ Book 6, p. 12.

yung sze, "Chancellor of the Exchequer" (A-ha-ma-teh), stated that there was a stone tissue at Poo-keh-tse hill which, when woven into cloth, resisted the fire. The emperor gave orders to have it gathered."

A short extract is given in the *Keh-che-king-yuen** from the 庶物異名疏 *Soo-wŭh-e-ming-soo*, "Disquisition on Common Things with Strange Names," on this subject, as follows:—"According to the Yung history 'Pĕĕ-k'ĕĕ-cheh hill produces a stone tissue, the cloth made from which resists the fire.' 楊升菴 Yang Shing-ngan† says:—'Fire-proof cloth comes from 建昌 Kien-chang, in the region of 蜀 Shuh. The substance is white as snow, and is obtained from crevices in the stones being the same as what the Yuen history terms the stone tissue."

張寧 Chang Ning, an author during the Ming dynasty, has the following remarks in a little work called 方洲雜言 *Fang-chow-tsa-yen*, "Desultory Notes on Regions and Islands":—"The first fire-proof cloth I saw was at the house of Chang Sing-e, in Soochow, and at the 純一 *Shun-yih*, "Pure Unity" Buddhist Cloister, in the district of 仁和 Jin-ho (at Hang-chow); in both instances about the size of a two cash piece. I have recently seen some at the house of Choo Ming-yu, long and narrow, like the sash of a dress. When saturated with oil it could be used as a candle; placed over the fire it might be used to burn incense on. When the oil was exhausted, and the fire extinguished, the cloth was as perfect as before. The statements regarding Leang-ke's handkerchief, the tribute in the time of Woo-ti, of the Wei dynasty, and the record in the Yuen history of the stone tissue at Pĕĕ-k'ĕĕ-cheh hill, which could be woven, are all credible, and no fables."

The 閩小記 *Min-seaou-ke*,‡ "Fuh-kien Memoranda," a work of the present dynasty, by 周亮工 Chow Leang-kung, has the following passage:—"When I was at 贛園 Kan-yuen the graduate Seay Urh-tseang brought out a strip of cloth and burnt it in the fire; it became quite red as it were reduced to ashes; but when the fire was extinguished the cloth was the same as at first. Urh

* Book 27, p. 24.

† The author of a work called the 丹鉛總錄 *Tan-yuen-tsung lŭh*, "Red Lead Record."

‡ Book 1, p. 14.

Tseang said:—'This is the cloth that is purified by fire. Twenty years ago it was very common in Fuh-kien, nor was it considered of great value; but now it cannot be obtained.' This shewed that the article came from beyond the seas. The ancients said that it was woven from the bark of a tree that grew on a burning mountain; while some say that it is from the hair of a rat. The statement that it is from the bark of a tree, is the most probable, as its colour is more like hempen than woollen fabrics."

MAGNETIC COMPASS IN CHINA.

The following remarks were suggested by a perusal of Capt. Shadwell's "Memorandum on the Magnetic Elements in China," published in the Asiatic Society's Journal.

The priority of the Chinese in the use of the magnetic compass is now so generally acknowledged, that any argument adduced to prove or illustrate it would be altogether superfluous. There is a clear statement of the use of the instrument, given in the *Shè kè*, written about the commencement of the Christian era. The fact of the declination of the needle having been known to them also from an early date, is not so well understood. There is, however, undoubted evidence of the fact, as may be seen by two or three quotations from native authors; at the head of which we place an extract from the *Lih sèáng k'aòu ching*, an imperial work which appeared about the end of the 17th century. On the 4th book, 2nd page, it says:—"To determine the situation and fix the position, is the most important consideration in astronomy; for the north and south being determined, observations may then be taken of the meridian stars, and the sun's course may be calculated. In a general way it is very easy to know the north and south; but in fixing a definite line, it must not deviate by a hairbreadth, if we would insure absolute accuracy. The magnetic needle cannot be taken as the standard, for it is found to have a declination, which varies according to the locality. Hence to obtain a direct north and south line, it is necessary to take observations by the sun and stars."

As the whole of the above work is merely a reflexion of the astronomical knowledge introduced by the Jesuits, the evidence it contains does not carry us much earlier than the 17th century; but a passage from the life of Yih-hîng, a Buddhist priest and imperial astronomer at the commencement of the 8th century, will show that the subject had engaged attention at least 900 years

earlier. It is said, that—"on comparing the needle with the north pole, he found the former pointed between the constellations *heu* and *wei*.* The pole was just on 6 degrees of *heu*, from which the needle declined to the right† (east) 2° 95′.‡ As it declined to the right of the north pole, it was necessarily to the left of the south pole."

We find also a reference to the same fact in a work written during the Sung dynasty, by Ch'in Ta'un-chung, entitled *Mung k'e peih t'an*. On the 7th page of the 24th book, he says:—"Scientific people rub the point of a needle with load-stone, which imparts to it the property of pointing to the south, but it always declines slightly to the west, and is not direct south. When it floats on the surface of water, there is too much oscillation. The finger nail, or the rim of a cup may be used to balance it on, when it will turn more freely: but being hard and smooth, it is liable to fall. The best plan is to suspend it by a silk fibre, thus—take a single-cocoon fibre of new silk, and attach it to the centre of the needle by a piece of wax the size of a mustard seed; then suspend it free from any current of air, when the needle will always point southward. Some are magnetized so as to point to the north. I have in my possession, both north and south pointing needles. The southern direction of the load-stone, like the western direction of the cypress tree, is a principle hitherto unexplained."

Although the Chinese may be said to have no knowledge of the change taking place in the magnetic elements, yet the two preceding quotations, it will be seen, furnish data of a certain kind on that head,—rude it is true, but perhaps not without a certain value, in view of the paucity of kindred information. Assuming that the notes were made from observations at the capitals of the respective periods, we find that at the beginning of the 8th century, the variation of the needle at Chang-ngan (the present Si-ngan), the capital of Shen-si, was 2° 95′ E. while at Pien-leang, the capital Ho-nan, three centuries later, there was a slight variation W.

In the *Lih é*, written by Seu Kwang-k'e, the Christian mandarin known to Europeans by the name of Paul Seu, we have the

* The constellation *heu* commences in Aquarius 19 deg. 13 m. 17 s.; *wei* begins in Aquarius 29 deg. 11 m. 13 s. The 28 constellations of the Zodiac are here used in an imaginary circle, the winter solstice being placed due north.

† In speaking of right and left, the person is supposed to face the north.

‡ The degree at that time was divided into 100 minutes.

following paragraph :—"The direction of the magnetic needle is not a true meridian line. By a systematic examination, we find that it differs for every place. In the capital (Peking) the declination is 5° 40′ E. If a sun dial were constructed, with this for a meridian, it would be in advance of the solstitial meridian over 21 m. 36 s. sidereal time."

In the *Kwei-jeh-kê yaou*, a small work on the sundial, by Mei, Wuh-ngun, the most celebrated mathematician of the present dynasty who flourished about the middle of the 17th century, we have the following :—"The exact meridian shadow must be taken due south; but direct south of the heavens is not the direct south to which the magnetic needle points; it must be taken a little to the west of the magnetic meridian. Schaal says that 'the needle coincides with the shadow of the gnomon when the latter is moved 7½ degrees east;' but this is doubtful."

The same author remarks :—"The indications of the needle are different for every place. For Nanking the declination is 3° E. For Soochow the declination is 2½ degrees E."

The subject is noticed in many other Chinese works. It should be remembered that unless otherwise notified, the variation is always taken from the south pole. From the above and other sources, making the necessary transpositions, we obtain the following approximative results. Schaal's statement is generally looked upon by the Chinese as a very rough approximation.

Date.	*Place.*	*N. Lat.*	*E. Long.*	*Declination.*	*Observer.*
1st half of 8th century	Chang-gan	34° 16′	108° 57′	2° 95′ E.*	Yih-hing.
Latter half of 11th do.	Pien-leang	34° 52′	114° 53′	Slightly W.	Chin Tsun-chung.
1st half of 17th do.	Peking	39° 54′	116° 28′	7° 30′ W.	John Adam Schaal.
Do. do.	Do.	„ „	„ „	5° 40′ W.	Seu Kwang-ke.
1690	Canton	23° 8′	111° 16′	2° 25′ W.	Fontenay.
Middle of 17th century	Nanking	32° 4′	118° 47′	3° 0′ W.	Mei Wuh-hgan.
Do. do.	Soochow	31° 23′	120° 25′	2° 30′ W.	Do.
1817	Canton	23° 8′	111° 16′	0° 0′	
1829	Peking	39° 54′	116° 28′	1° 45′ W.	

* This allows 100 minutes to the degree.

A. W.

JOTTINGS ON THE SCIENCE OF THE CHINESE ARITHMETIC.

There are a few discoveries, such as the magnetic needle and the typographic art, which have been of indisputable service in the advancement of civilization, priority with respect to which, is by universal consent ascribed to the Chinese; a certain superiority in some of the arts, many will admit that these people possess; some questions in modern science have received a practical illustration in the ordinary habits of the "Flowery" race, and some few have been constrained to admit, that they have for time out of mind, possessed a perfect knowledge of facts, which have been but recently arrived at through the medium of theory in the west. Beyond this few are disposed to accede to the pretensions of this people, and the suggestion of any degree of eminence in abstract science is by many thought to be unworthy of a moment's consideration. It is possible, however, that a little investigation might establish juster views. The object of the following desultory notes, made from time to time, in the course of some researches entered upon, with another purpose in view, is to draw attention to the state of the arithmetical science in China, a subject which has not been so fully explored as it might with advantage, and on which some erroneous statements have been current in modern publications.

The Roman Catholic missionaries who had from the commencement of the seventeenth century begun to acquire fame and influence at court, continued to retain and fortify their position, and on the change of dynasty taking place, they found themselves even more favourably circumstanced than before; by means of the works

of Ricci, Schaal and others, much of the science of Europe had been laid open to the Chinese; their system of astronomy and methods of computation had at length overcome the scruples of the native mathematicians; the Astronomical Board was placed very much under their control, and the native methods which had continued to be used till the end of the Ming dynasty, were now fairly supplanted by the Western rules. In these circumstances the young Emperor Kang-hi, who assumed the reins of government at the age of fourteen, was brought in some measure under the tutorage of the foreign missionaries, and being naturally gifted with a high degree of intelligence he readily entered into the spirit of their instructions, and became deeply imbued with a love for science in all its bearings.

During the brilliant reign of this emperor, men of genius were attracted from the remotest corners of the empire by the splendours of the imperial court and the encouragement offered to the devotees of science; among others appeared a man of no ordinary mental standing, 梅勿庵 Mei Wuh-ngan, a native of Hwuy-chow; not, however, in the character of an aspirant for office, or as a mere candidate for imperial favour, for being zealously attached to the interests of the Ming dynasty, he steadily refused to the end of a long life every offer to enter the service of their successors.

With this man the emperor held frequent consultations on subjects congenial to the minds of both. Mei had become thoroughly conversant with the works of the foreigners, as is evident from the voluminous writings he has left behind him; but his shrewd mind did not allow him to stop here, for on ransacking the stores of antiquity he came to the conviction that in over-estimating the merits of the missionaries, his countrymen were unjustly neglecting the ancient native works, and that in fact there was very little in the recently introduced theories which they had not themselves possessed for centuries before. This assertion Mei proceeded to prove and illustrate by extensive quotations from the remaining works of the ancients, and it was probably owing to the development of this fact in a great degree that we may ascribe the cause of the foreigners so soon after having declined in favour

at the imperial court; for in a large mathematical work, the 律曆淵源 *Leuh-leih-yuen-yuen*, compiled by the personal efforts of Kang-hi and his chief councillors, and published soon afterwards, the influence of such views is clearly to be traced. In one of the introductory chapters to that work, after acknowledging their obligations to Ricci, Schaal, Verbiest and other foreigners, for the good service they had rendered towards the perfection of the numerical sciences, the question is suggested,—Whence did these foreigners originally gain their knowledge? and the answer is complacently given,—that it has flown abroad from the central land. The scanty notices of celestial phenomena, recorded in the histories of the early monarchs, are held to be confirmatory of this view; and if few written evidences of the flourishing state of science at that period, have come down to the present age, the cause is to be attributed to that catastrophe in the history of literature, the burning of the books by *Chi Hwang-ti*, the first emperor of the Tsin dynasty* above two centuries before the Christian era. Fortunately we are told, during the palmy days of the sages, when the transforming influence of the central kingdom had extended to the uttermost bounds of the habitable earth their books on science had been translated into the languages of foreigners; and hence it happened that when all the native works were consigned to the flames the foreigners became the sole depositories of these valuable treasures, the veritable productions of the celestial sages. In this way the superiority of foreigners where admitted is ingeniously accounted for.

One may be inclined to smile at the statement above set forth, and if the assertion of some modern writers be correct it will be perfectly legitimate to do so. If, however, instead of dispatching the subject in that summary style we take the pains to enquire how far Chinese authorities may be trusted in the matter we may find that as a practical question it is deserving of investigation, and facts may be brought to light which will show that the Chinese had some knowledge of mathematics at a very early date.

* For a notice of this event see Williams' "Middle Kingdom," vol. 2, p. 160.

To ascertain the actual state of arithmetic among the Chinese it might be sufficient to run over the contents of some of the principal modern publications on that science; but as they have confessedly gained something from the Roman Catholics during the past two centuries, and previous to that time, their intercourse with the Arabians during the Yuen dynasty, doubtless added to their stock of mathematical acquirements, it will be interesting to discover somewhat respecting the state of their knowledge anterior to these successive accretions.

Setting aside the vagaries of Fo-hi, as little to the purpose, the earliest definite notice of the science of numbers is to be met with in the 通鑑綱目 *Tung-kien-kang-muh*, "General History of China," where it is stated, under the reign of 黃帝 Hwang-ti, that he caused his minister 隸首 Li Show to form the 九章 *Kew-chang*, "Nine Sections of Arithmetic." Many other improvements are attributed to this monarch, and among them the sexagenary cycle. Although there is much vagueness about records of that early period which is scarcely admitted within the range of authentic history, yet it is a remarkable fact that the present chronological era of cycles dates its commencement from the sixty first year of that emperor (B.C. 2637).

The Nine Sections, attributed to Hwang-ti, have formed the nucleus of arithmetical science in China, and although it would be difficult to conjecture how far the ancient sage was acquainted with the substance of these sections, or whether indeed it be true that they ever came under his notice, the work has been handed down to us with abundant evidence from a very remote period, and has been largely expounded and illustrated by an almost unbroken succession of authors down to the present day.

The history of 堯 Yaou has been frequently quoted, to show that the Chinese had made a considerable advancement in science by his time (B.C. 2300). From the 書經 Shoo-king we learn that he had a Board of Astronomers for making the calculations and forming a calendar, with a view of the motions of the heavenly bodies, that the solstices and equinoxes were marked, and that the length of the year was known within an hour of the true time. All this indicates that some attention was paid to the science of numbers.

But the document which can be traced with certainty to the greatest age, in which we have any detail of mathematical principles, is a brief dialogue held between the famous 周公 Chow Kung and a nobleman of the recently vanquished Shang dynasty named Kaou, generally known as 商高 Shang Kaou, about B.C. 1100. It is entitled the 周髀 *Chow-pi*, Thigh-bone of Chow.* As it is an object of some interest on account of its great antiquity, the translation is given here of the first section, which forms an epitome of the whole:—

"1. Formerly Chow Kung addressing Shang Kaou, said:—I have heard it said my lord that you are famous at numbers; may I venture to ask you how the ancient Fo-hi established the degrees of the celestial sphere? There are no steps by which one may ascend the heavens, and it is impracticable to take a rule and measure the extent of the earth; I wish to ask then how he ascertained these numbers? 2. Shang Kaou replied:—The art of numbering originates in the circle and quadrangle. 3. The circle is derived from the quadrangle. 4. The quadrangle originates in the right angle.† 5. The right angle originates in the multiplication of the nine digits. 6. Hence, separating a right angle into its component parts, if the base be equal to 3, and the altitude to 4, a line connecting the farther extremities will be 5. 7. Square the external dimensions, and half the amount will give the area of the triangle. 8. Add together all the sides, and the result will equal the sum of 3, 4 and 5. 9. The square of the hypotheneuse being 25, is equal to the squares of the two short sides of the triangle. 10. Thus the means by which 禹 Yu restored order throughout the empire was by following out the principles of these numbers. 11. Chow Kung exclaimed:—How truly great is the theory of numbers! May I ask what is the principle of the use of the rectangle? 12. Shang-kaou replied:—The plane rectangle is formed by uninclined straight lines. 13. The direct rectangle is used for observing heights. 14. The reversed rectangle is used for fathoming depths. 15. The flat rectangle is used for ascertaining distances. 16. By the revolution of the rectangle the circle is formed. 17. By the junction of rectangles the square is formed. 18. The square pertains to earth, the circle belongs to heaven, heaven being round and the earth square. 19. The numbers of the square being the standard, the dimensions of the circle are deduced from the square. 20. The circular plate is employed to represent heaven; the celestial colours are blue and black, the terrestrial are yellow and red; the circular plate is formed according to the celestial numbers; it is blue and black

* The name which at first sight appears a little *outré*, receives its explanation from the two characters 句股 Keu-koo used to designate the base and altitude of a triangle, and which mean originally the Leg and Thigh. It may call to mind also a similar device in our English term, Napier's Bones.

† The term right angle is used here to designate the 勾股 *keu-koo*, two short sides of a right angle triang

outside, red and yellow inside, in order to represent the celestial and terrestrial stations. 21. Therefore he who understands the earth is a wise man; he who comprehends the heavens is a sage. This knowledge begins with the straight line; the straight line is a component part of the rectangle, and the numbers of the rectangle are applicable to the construction of all things. 22. Chow Kung exclaimed, Excellent indeed!"

The sentences are numbered here for convenience in reference. Several things deserve attention. In 3 there is allusion to the quadrature of the circle; 4 and 5 refer to plane mensuration; 6 gives the ratio of the hypotheneuse to short sides of a right angle triangle; 7 states that a quadrangle bounding the three angles of a triangle contains double the area of said triangle; 8 states the whole to be equal to the sum of the several parts; 9 is the well known 47th proposition of the 1st Book of Euclid; 13, 14 and 15 show that the author understood the application of trigonometry to the measurement of distant objects; 16 gives the fundamental principle upon which the area of the circle is calculated; the circular plate mentioned in 20 seems to have been some ancient instrument for representing the appearance of the heavens and the earth, the form of which is not very well understood now.

At the 11th page of the 2nd Book of the 周禮 *Chow-li*, Chow Ritual, the authorship of which is attributed to Chow Kung, in the list of the officers of instruction, the duties of the Royal Tutor are said to be "to train up the eldest sons of the prince and the nobility, in the six arts, to wit, the 5 classes of rites, the 6 kinds of music, the 5 laws of archery, the 5 descriptions of carriage-driving, the 6 rules of writing and the 9 methods of numbering." The 9 methods of numbering are explained by the commentators to be the *Kew-chang* or Nine Sections.

With the exception of an occasional allusion in the ancient classics we have little further respecting the science previous to the great conflagration, when Chi Hwang-ti ordered the destruction of all the native books. Subsequent to this period the works are too numerous to admit of recording even their titles; a brief notice of some of the most prominent must suffice.

About a century before the Christian era 張蒼 Chang Tsang published the 九章算術 *Kew-chang-swan-shuh*, "Arithmetical Rules of the Nine Sections," which professes to embody the principles

of arithmetic employed by the Royal Tutor during the Chow dynasty. It is not given forth, however, as an original composition, but merely pretends to be a revised and corrected edition of a much older work, the author of which is now unknown. The work has been preserved by successive editions down to the present time, but it is now extremely rare; it is probably the oldest exemplar of the Kew-chang extant. Commentaries have been written on it by several authors.

During the third century 孫子 Sun-tsze, an author of considerable note, published his 算經 *Swan-king*, "Arithmetical Classic." This work is referred to by almost every subsequent writer on the subject. Several commentaries have been written on it.

About the same time also appeared the 術數記遺 *Shuh-soo-ki-i*, "Record of Rules and Calculations" by 徐岳 Seu Kew, which has been explained and commented on by succeeding authors.

Before the sixth century 夏侯陽 Hea How-yang published his 算經 *Swan-king*, "Arithmetical Classic," in which he broached some innovations on ancient practice, not confining himself strictly within the limits of the Kew-chang, which had been invariably followed by all his predecessors.

About the fifth century 劉衡 Low-hwuy published 重差望測之術 *Chung-cha-keae-tsih-wang-ch'i-shuh*, "The Whole System of Measuring, by the Observation of several beacons." This was republished in the eighth century under the title of 海島算經 *Hae-taou-swan-king*, "The Island Arithmetical Classic," the name being adopted from the first problem in the book, which is on measuring an island from a distance.

五曹 Woo Tsaou, who was about contemporary with the two preceding, wrote a 算經 *Swan-king*, "Arithmetical Classic," which is much referred to.

At the beginning of the seventh century a treatise on trigonometry was published by 趙爽 Chaou Shwang, called the 周髀算經 *Chow-pi-swan-king*, "Arithmetical Classic of the Chow Trigonometry." This, however, is said to be but a subsequent edition of a very much older work, which is looked upon as the original native production on trigonometry.

In the seventh century 甄鸾 Chin Lwan wrote a treatise called the 五經算術 *Woo-king-swan-shuh*, "Arithmetical Rules of the Five Classics," embodying the various problems alluded to in the Yih-king, Shoo-king, She-king, Li-ki, Chun-tsew, Heaou-king and Lun-yu. A commentary was written on this work by 李淳風 Li Chun-fung.

About the same time as the preceding 張邱建 Chang Kew-kien wrote his 算經 *Swan-king*, "Arithmetical Classic," the conciseness of the text of which, it is said, renders it difficult to be understood. Several authors of celebrity have undertaken to write commentaries on and illustrate it.

Towards the close of the eighth century 王孝通 Wang Heaou-tung, an imperial librarian during the Tang dynasty, issued his 緝古算經 *Tseih-koo swan-king*, "Arithmetical Classic of Ancient Formulæ," with a commentary by himself; it consists of 20 problems on solid mensuration, in illustration of the 5th of the Nine Sections. The text is said by natives to be very abstruse. An edition of this work was published at Soochow in 1803 with all the problems worked out at full length and explained by 張敦仁 Chang Tun-jin.

During the Tang dynasty a Buddhist priest, named 一行 Yih-hing, was raised to power, in consequence of his mathematical attainments. His works on astronomy, arithmetic, the variation of the magnetic needle and kindred subjects have gained him a lasting reputation. It was probably about or before this time that the Chinese received what little they seem to have got from India. Several of the highest terms in their series of numbers evidently bespeak an Indian origin, as 恒河沙 *Hang-ho-sha*, literally "Sands of the Ganges"=10,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000 extending to 53 places of figures, 阿僧祇 *A-seng-chi*, reaching to 57 places, etc.

During the Sung dynasty, which lasted from 950 to 1280, several authors of note appeared. Among others 秦九韶 Tsin Kew-shaou about 1240 published the 數書九章 *Soo-shoo-kew-chang*, "Nine Sections of the Art of Numbers."

Ten years later 楊輝 Yang Hwuy published a work entitled 詳解九章算法 *Seang-keae-kew-chang-swan-fa*, "Explanation of the Arithmetic of the Nine Sections," besides 詳解日用算法

Siang-kiai-jeh-yung-swan-fa, "Explanation of Arithmetic for Daily Use," and 乘除通變本末 *Shing-choo-tung-pien-pun-muh*, "Complete Treatise on the Mutations of Multiplication and Division." The works of the last-mentioned two authors were republished in Shanghai three years since.

At the commencement of the Yuen dynasty, about 1300, 郭守敬 Ko Show-king made considerable improvements on the methods of calculation hitherto adopted. The introduction of spherical trigonometry is ascribed to him, and although his production is now lost there is still a work published in the Ming dynasty called 弧矢算術 *Hoo-shi-swan-shuh*, "Arithmetical Rules for Arcs and Versed-sines," embodying his principles with illustrations.*

During the Yuen dynasty 李冶 Li Yay published 測圓海鏡 *Tseh-yuen hai-king*, "Mirror of the Mensuration of Circles," in which a species of algebra is applied to the solution of problems in trigonometry. While this dynasty was in power it is probable that some improvements may have been introduced by the Arabs, as we know that they held much intercourse with China at that time.

It appears, however, that many of their books on science which they introduced were not translated into the native language, and consequently remained a dead letter after they were bequeathed by their original possessors. Some of these were found in the imperial library on the accession of Hung Woo the founder of the Ming dynasty. This monarch employed two of his ablest scholars, with the aid of Mahommedan officers, to translate them, but the subject was altogether so foreign to their attainments and the terms employed beyond their comprehension, that there is reason to think that the result of their labour would be but an unprofitable production. When they had completed their task the book was called the 乾元先聖之書 *Kien-yuen-sien-shing-chi-shoo*, "Book of the Former Sages on the Celestial Origin." This book is now unattainable, but there is ground to believe that it was the translation of some works on Algebra.

* It is asserted in Murray's China, vol. 3, p. 259, that previous to his time the ratio of the circumference to the diameter of the circle had not been known nearer than 3 to 1. This is a mere figment.

In the earlier part of the Ming dynasty arithmetical science seems to have been at a very low ebb, scarcely any work of importance having appeared, although several books were written on the manipulation of the abacus and its application to the various formulæ; so that on the arrival of the Jesuit missionaries in the seventeenth century, their recently perfected theories had the advantage of comparison with the native science at one of the most unfavourable periods of its history.

It is by no means an easy task to arrive at the exact meaning of most of the books here mentioned, for little assistance towards their interpretation can be gained from the ordinary run of teachers; few general principles are given, but they are left to be deduced from a variety of examples, and these for the chief part are stated with most perplexing brevity, besides being burdened with a number of obsolete terms and antiquated allusions; a separate rule is generally given for every problem, but a careful analysis of the various examples will enable the student to gain insight into the principles they illustrate.

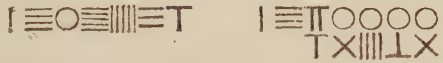
Those who are fond of tracing the origin of numeral characters, will probably find in these records a strong corroboration of the digital theory, or that which assigns the number of fingers on the hands as the foundation of decimal notation. In this respect the ancient Chinese characters approximate to the Roman numerals. It has been erroneously stated by some authors that the Chinese have used the 算盤 *Swan-pan* or abacus from time immemorial whereas its introduction appears to be of but comparatively recent date. In ancient times calculations were carried on by means of 籌 *Show* or tallies made of bamboo, and the written character is evidently a rude representation of these. From 1 to 5 the numbers are represented by the respective number of parallel strokes; from 6 to 9 inclusive, one stroke is drawn to represent 5; and the additional number is represented by so many strokes perpendicular to it; thus 𝍠 3, 𝍡 6, 𝍢 7.* Having thus obtained

* We find an incidental evidence of the antiquity of these symbols in the 33rd vol. of the Tso-chuen, a historical work written by a disciple of Confucius five centuries before the Christian era, where it is said,—In the 30th year of Seang Kung an old man, on being asked his age, replied, —I am but a humble individual and unable to compute years; I only know respecting the year that I was born, that it was on the first day of the cycle in the first

the year

a simple but sufficiently effective system of figures, we find the Chinese in the actual use of a method of notation depending on the theory of local value several centuries before such theory was understood in Europe, and while yet the science of numbers had scarcely dawned among the Arabs.

In the Penny Cyclopœdia, vol. 2, p. 338, it is said: "The Chinese have no written method of expressing local value, though their *Swan-pan* is a practical use of the principle." Sir John Davis, in a paper read before the Asiatic Society in 1823 stated: "The Chinese possess no real science of their own, and that they obtained none from the Hindus, is, I think, proved by the readiness with which they adopted that of the Europeans." This remark he goes on to support by several arguments, and he has been frequently quoted as an authority by writers on the subject. Again the same author in his interesting work on the Chinese, vol. 2, p. 283, remarks: "The Chinese numbers are *written* in words at length, that is, unlike the Arabic system of numeration, where the powers of the numbers increase or diminish decimally according to position." An example from any native work will be a sufficient reply to the above statements. The following is taken at random from the works of Tsin Kew-chaou of the Sung dynasty, and is a fair specimen of the ancient notation:—



In this subtraction sum it will be seen at a glance that the author had the same view with regard to local value, including the use of the cypher, as that universally adopted by modern civilized nations; the above sum in European figures stands thus:—

1,470,000
64,464
———
1,405,536

It is taken out of the middle of a complicated problem.

month, from which to the present time, 445 cycles lacking one-third, have elapsed. On hearing this, the enquirer repaired to the palace for a solution; to which the Recorder Chaou replied: 亥有二首六身下二如身. The character 亥 Hae has 2 for its head, 6 for its body; the two lower limbs resembling the body, which is the number of days. Sze Wan-pih rejoined: Then his days are 2,666 decades. The antique form of the character will make this clearer 亥. If we analyze this figure we find it composed of 亠 2 for the head, 丄 6 for the body, while the two lower members are each 丁 6. Reversing the figure of the symbol does not alter its power.

In the old arithmetical works, no initiatory rules are given corresponding to our Addition and Subtraction; but these are supposed to be understood by the student, before commencing his methodical application. They have indeed the words 加法 *Kia-fa*, Addition, and 減法 *Kien-fa*, Subtraction, but the reader must be careful not to confound these with the notions which the same terms convey to us. The Chinese *Kia-fa* is a substitute for our multiplication, performed by successive additions to the original sum, while *Kien-fa* is a substitute for division; each of these are divided into five or six rules, the main feature of which consists in reducing the first figure of the working factor to unity, and treating the remaining figures as aliquot parts. The English idea of addition is conveyed by the words 合 *Ho* or 併 *Ping*, "to combine." And here it may be remarked that in the modern use of many of the terms there is an obvious deflection from the ancient meaning of these same terms, the cause of which will be explained by subsequent remarks in this paper.

Their 乘法 *Shing-fa*, Multiplication, is the same in theory as ours, but instead of beginning at the right hand as we do, they begin at the left. Multiplication by a single figure is called 因 *Yin*.

Division by a single figure is termed 歸 *Kwei*; where the divisor consists of more than one figure, or long division, it is called 除 *Choo*: these terms, however, do not cover the same extent of meaning as our word Division, they merely apply to division by concrete numbers, which, as the word *choo* implies, is in theory the same as repeated subtraction: division by abstract numbers or where a number is divided into any number of equal parts is expressed by 約 *Yo*. The working factor whether multiplier or divisor is called 法 *Fa*; the worked factor, whether multiplicand or dividend is 實 *Shih*; a single multiplication of the divisor in a division sum is termed 商 *Shang*.

The ancient Kew-chang consists of 246 problems in all, distributed under the following nine heads:—

I.—方田 *Fang-tien*. Plane Mensuration; which contains besides an exposition of multiplication and division, a series of examples with rules attached, for measuring fields of various forms,

quadrangular, triangular, circular, semicircular, segment, annular, &c. The rule given for measuring the triangle is to multiply the base by half a perpendicular dropt from the opposite angle, or the converse of this. 6 rules are given for finding the area of the circle:—1. Multiply semi-diameter by radius; 2. Take $\frac{1}{3}$ of square of semi-circumference; 3. Take a twelfth of square of circumference; 4. Take $\frac{1}{4}$ of 3 times the square of diameter; 5. Take $\frac{1}{4}$ of product of diameter and circumference; 6. Take 3 times square of radius. Although the ratio of the circumference to the diameter of the circle is here set down at 3 to 1, native authors tell us that it was not that the compiler was ignorant of a much closer approximation to the true value, but the necessities of the case did not require it; in the 密率 *Meih-suh* of 祖沖之 Tsoo Chung-chi, published about the end of the 6th century, it is set down at 22 to 7, while Lew Hwuy, still earlier, gives it 157 to 50. Two rules are given for segment fields:—1. Add the product of the sine and versed-sine to the square of the versed-sine, and halve the sum; 2. Multiply the sum of the sine and versed-sine and halve the amount. Two rules are given for annular fields:—1. Multiply half the sum of the outer and inner circumferences by the diameter; 2. Take a twelfth of the difference between the respective squares of the outer and inner circumferences.

II.—粟布 *Shuh-poo*, Proportion. This section is chiefly occupied with Rule of three questions, on the comparative value of grain of divers kinds and qualities. The various weights and measures are all regulated by the *Hwang-tsung*, one of the musical tubes, which is divided into 90 parts in length, one division forming a *fun* (line), 10 *fun*, 1 *tsun* (inch), 10 *tsun*, 1 *shih* (foot), &c. The *Hwang-tsung* contains 1,200 grains of rice, and 10 of these tubes full are equal to 1 *ho*: 10 *ho* are equal to a *shing* (pint), &c. The 1,200 grains contained in the *Hwang-tsung* are equal in weight to 12 *choo* (penny-weights); 24 penny-weights make a *leang* (ounce); 16 ounces make a *kin* (pound), &c.

III.—衰分 *Shwae-fun*, Fellowship. This section teaches the division of property among several partners, in unequal shares, such as the relative proportions of 1 to 3, 2 to 8, 3 to 7, &c., in continued progression.

IV.—少廣 *Shaou-kwang*, Evolution. The object of this section is to elucidate the extraction of the square and cube roots, which it does in a series of 24 problems, where the principles are applied not merely to equilateral squares and cubes, but also to parallelograms and parallelopipeds of every possible dimension. The rules are very much the same as those in use at the present day in school books in England, while the arrangement of the nomenclature certainly does not suffer by comparison with our system: for the various parts of the process taking their names from the geometrical figure, the operator is enabled to see at every step the particular object of what he is performing. The next lower term to the given power is called 方 *fang* "square;" in the cube, the next term is the 廉 *lien*, "angle" or "line;" while the lowest in each in the 隅 *yu*, "corner or "unit." There is no reference to any higher power than the cube.

V.—商功 *Shang-kung*. Solid Mensuration. This section treats principally of the calculation of public works, such as building walls and fortifications, raising turrets and mounds, excavating pits and fosses, the rules being applied to ascertain the cubic measurement of all rectilineal bodies where the surfaces are not at right angles to each other, or where a mean is required between two dimensions, such as the prism, the pyramid, the cone and their respective frustra, &c., &c.; but the application is not confined merely to substances, or even spaces, for several problems are given on the comparative speed of different kinds of travelling, on foot, on horseback and by boat; also the comparative qualities of labour, &c., all worked out on the same fundamental principle.

VI.—均輸 *Kiun-shoo*. Alligation. The main object of this section seems to be the levying of an average impost, according to the amount of land, the number of the population, the distance and the portability of the tribute; it is also applied to the mixture of various articles differing in price, so as to attain a given standard; and to find the respective numbers of several kinds in a given assemblage. The following is one of the examples of the last-mentioned division:—Suppose there are a number of rabbits and pheasants confined in a cage, in all 35 heads and 94 feet: required the number of each? Ans. 23 pheasants, 12 rabbits.

VII.—盈朒 *Yin-nuh*, Surplus and Deficiency. This consists of a kind of proportion, where the required sum is obtained through the relative ratios of the remainder or deficiency of two series; the questions take the following form:—A number of men bought a number of articles, neither of which are known; it is only known that if each man paid 8 cash, there would be a surplus of 3 cash; and if each man paid 7 cash, there would be a deficiency of 4 cash; required the respective numbers? Ans. 7 men, 53 articles.

VIII.—方程 *Fang-ching*, Equations. This section is remarkable as containing an exposition of the use of the terms 正 *ching*, "plus" and 負 *foo*, "minus." In a series of 18 problems it gives the method of ascertaining the value of unknown quantities from certain conditions of combination, depending on the number of terms in the equation. The following is one of the simplest examples:—If 5 oxen and 2 sheep cost 10 taels of gold, and 2 oxen and 8 sheep cost 8 taels, what are the prices of the oxen and sheep respectively? Ans. Each ox 1 tael and 13 twenty-first parts; each sheep, 20 twenty-first parts of a tael.

IX.—句股 *Kiu-koo*,* Trigonometry. This section is illustrated by 24 problems, some of which are curious in themselves, and a selection is here given, preceded by the corresponding rules, from which the character of the whole may be judged. Nothing is attempted beyond the right-angled triangle, the capabilities of which, however, are tolerably well exhausted. In the following examples let a represent the base, b the altitude and c the hypothenuse.† 1. Given the difference of altitude and hypothenuse, and the base; to find the hypothenuse.

$$(a^2 - \overline{c - b}^2) \div 2\overline{c - b}$$ Ex.

There is a pool 10 feet square, with a reed growing in the centre, which rises a foot above the surface; when drawn towards the shore it reaches exactly to the brink of the pool; what is the depth of water? Ans. 12 feet. 2. Another method.

* It is not pretended that the names here given are a translation of the Chinese characters; they have been adopted from an analysis of the several rules, and although these do not exactly correspond with the rules of same name in Western treatises, yet as there is generally a near approximation it has been thought more convenient to use them than to transfer the sounds of the characters, or to give a literal translation; as for example these would read:—1. Squaring fields. 2. Rice and money. 3. Declining divisions. 4. Paucity and breadth, &c.

† Algebraic symbols are used here for the sake of brevity; it is not meant to imply that these are in the original.

$$(a^2 + \overline{c-b^2}) \div 2\overline{c-b} \text{ Ex.}$$

On opening a two-leaved door, when the inner edge of the leaves are a foot from the door frame, there is an opening of 2 inches between the leaves; what is the width of the door? Ans. Each leaf $50\frac{1}{2}$ inches. 3. Another method.

$$a^2 \div \overline{c-b} + c - b \text{ Ex.}$$

A chain suspended from an upright post has a length of 2 feet lying on the ground, and on being drawn out to its full extent, so as just to touch the ground, the end is found to be 8 feet from the post; what is the length of the chain? Ans. 17 feet. 4. Another method.

$$\left(\frac{a}{2}\right)^2 \div \frac{c-b}{2} + \frac{c-b}{2} = c \text{ Ex.}$$

There is a circular beam of wood in a wall, the dimensions of which are not known, but on inserting a saw it is found that when it has entered an inch in depth the saw-cut is a foot in length; what is the diameter of the piece of wood? Ans. 2 feet 6 inches. 5. Given the sum of the altitude and hypothenuse, and the base, to find the altitude.

$$\frac{b + c - \overline{a^2 \div b + c}}{2} \text{ Ex.}$$

There is a bamboo 10 feet high, the upper end of which being broken down on reaching the ground, the tip is just 3 feet from the stem; what is the height to the break? Ans. feet 4 and 11 twentieths. This problem is said to be contained also in the Indian mathematical work, Brahmegupta (see *Journal Asiatique, Mars*, 1839). 6. Given the base and altitude to find the sum and difference of these and the hypothenuse.

$$2ab \div \overline{c + a + b} \text{ Ex.}$$

What is the diameter of the largest circle that can be inscribed within a right-angled triangle, the two short sides of which are respectively 8 and 15. Ans. 6.

Such is a very superficial outline of this venerable memento of a bygone age. A curious characteristic deserving of notice is the fact that every section and subdivision commences with a stanza of rhyme, embodying in a general way the rule in question; the

meaning is not always very apparent on the surface, but the quaintness of the phraseology is calculated to fix them on the memory; and on a minute inspection it will be seen that they contain in a concise form the leading ideas which they are intended to convey, very accurately expressed.

In examining the productions of the Chinese one finds considerable difficulty in assigning the precise date for the origin of any mathematical process; for on almost every point, where we consult a native author, we find references to some still earlier work on the subject. The high veneration with which it has been customary for them to look upon the labours of the ancients, has made them more desirous of elucidating the works of their predecessors than of seeking fame in an untrodden path; so that some of their most important formulæ have reached the state in which we now find them by an almost innumerable series of increments. One of the most remarkable of these is the 大衍 *Ta-yen*, "Great Extension," a rule for the resolution of indeterminate problems. This rule is met with in embryo in Sun Tsze's Arithmetical Classic* under the name of 物不知數 *Wuh-puh-chi-soo*, "Unknown Numerical Quantities," where after a general statement in four lines of rhyme the following question is proposed:—

Given an unknown number, which when divided by 3, leaves a remainder of 2; when divided by 5, it leaves 3; and when divided by 7, it leaves 2; what is the number? Ans. 23.

This is followed by a special rule for working out the problem, in terms sufficiently concise and elliptical, to elude the comprehension of the casual reader:—

Dividing by 3 with a remainder of 2, set down 140; dividing by 5 with a remainder of 3, set down 63; dividing by 7 with a remainder of 2, set down 30; adding these sums together gives 233, from which subtract 210, and the remainder is the number required.

A more general note succeeds:—

For 1 obtained by 3, set down 70; for 1 obtained by 5, set down 21; for 1 obtained by 7, set down 15; when the sum is 106 or above subtract 105 from it, and the remainder is the number required.

* Native writers are divided in opinion as to the time when Sun Tsze lived; some consider him the same as Sun Woo-tsze, a military officer during the Heptarchy, about B.C 220. The more probable opinion, however, is that he lived towards the end of the Han or during the Wei dynasty in the third century of the Christian era.

In tracing the course of this process we find it gradually becoming clearer till towards the end of the Sung dynasty, when the writings of Tsin Keu-chaou put us in full possession of the principle, and enable us to unravel the meaning of the above mysterious assemblage of numerals. Applying the principles of the *Ta-yen* as there laid down:—Multiplying together the three divisors 3, 5 and 7, gives 105 for the 衍母 *Yen-moo*, "Extension Parent." Divide this by the 定母 *Ting-moo*, "Fixed Parent," 7, the quotient 15 is the 衍數 *Yen-soo*, "Extension Number." Divide this again by 7, and there is an overplus of 1, which is the 乘率 *Ching-suh*, "Multiplying Term;" by which multiply the Extension Number 15, and the product 15 is the 用數 *Yung-soo*, "Use Number," or as it is given above,—*for* 1 *obtained by* 7, *set down* 15. Divide the Extension Parent 105 by the Fixed Parent 5, and the quotient 21 is the Extension Number. Divide this again by 5, and the overplus 1 is the Multiplying Term. Multiply the Extension Number 21 by this, and the product 21 is the Use Number; which is given above,—*for* 1 *obtained by* 5, *set down* 21. Divide the Extension Parent 105 by the Fixed Parent 3, and the quotient 35 is the Extension Number. Divide this again by 3, and there is a 奇 *Ke*, "Remainder" of 2. This Remainder being more than unity is then submitted to a subsidiary process termed 求一 *Kiu-yih*, "Finding Unity," which is the alternate division of the Extension Parent and Remainder by each other, till the remainder is reduced to 1; the result in the present instance is 2, which is the Multiplying Term; by which multiply the Extension Number, and the product 70 is the Use Number, which is the meaning of the sentence,—*for* 1 *obtained by* 3, *set down* 70. Having thus obtained the several Use Numbers multiply the corresponding original remainders by these:—

$70 \times 2 = 140$; $12 \times 3 = 36$; $15 \times 2 = 30$; add these numbers together as stated in the rule, and the sum is 233, from which subtract as many times the Parent Number 105 as it will admit, which making 210 the remainder is 23, the number required.

The general principles of the *Ta-yen* are probably given in their simplest form, in the above rudimentary problem of Sun Tsze. Subsequent authors enlarging on the idea, applied it with much effect to that complex system of cycles and epicycles which form

such a prominent feature in the middle-age astronomy of the Chinese. The reputed originator of this theory as applied to astronomy is the priest Yih Hing, who had scarcely finished the rough draft of his work 大衍曆書 *Ta-yen-leih-shoo*, when he died A.D. 717.

But it is in the "Nine Sections of the Art of Numbers" by Tsin Keu-chaou that we have the most full and explicit details on this subject. Here we have the various applications of this theory worked out at great length; the first problem being to find a solution of a passage in the Yih King treating of the origin of the divining numbers:—

Qu. In the Yih King it is said:—'The Great Extension Number is 50, and the Use Number is 49. Again it is said:—'It is divided into 2, to represent the 2 spheres; 1 is suspended to represent the 3 powers; they are drawn out by 4, to represent the 4 seasons; three changes complete a symbol, and eighteen changes perfect the diagram.' What is the rule for the Extension and what are the several numbers?

The 4 cardinal numbers—1 the senior male, 2 the junior female, 3 the junior male and 4 the junior female—are used to start with as the Origin Numbers. In a second row, opposite each number respectively, is placed the product of the other three.

Origin Numbers - - - -	1	2	3	4
Extension Numbers - - -	24	12	8	6

The sum of these lower numbers gives 50, the *Great Extension Number* alluded to in the text of the Yih King: 50 being an even number and consequently unsuitable for the Use Number, the Origin Numbers are severally taken in pairs and common divisors sought: where this is obtained the number which gives an odd quotient is divided by it, but the other is not. The result of this last operation gives the Fixed Parent Numbers, and the Extension Numbers are obtained the same as before.

Fixed Parents - - - - -	1	1	3	4
Extension Numbers - - -	12	12	4	3

Subtract from the respective Extension Numbers as many of the corresponding Fixed Parents as they will admit, so as always to leave some remainder.

Fixed Parents - - - - -	1	1	3	4
Remainders - - - - -	1	1	1	3

The three Remainders 1 become the respective Multiplying Terms, and submitting the last Remainder 3 to the process for Finding Unity, the Multiplying Term 3 is obtained. By these four terms multiply the respective Extension Numbers, and the Expansion Use Numbers are obtained.

Fixed Parents - - - - -	1	1	3	4
Expansion Use - - - -	12	12	4	3

The second Origin Number 2 having been reduced 1 at the beginning, once the Extension Parent 12 is consequently added to the second Expansion Number, and the Expansion Numbers then become the Fixed Use Numbers, and stand as follows:—

Origin Numbers - - - -	1	2	3	4
Fixed Use Numbers - - -	12	24	3	9

The four upper numbers here are those employed in drawing the divining straws. The sum of the four lower numbers is 49, which is denominated the *Use Number* in the text of the Yih King, being the number of the straws used in divination. These 49 divining straws being divided at random between the two hands, one hand containing an even number, the other must contain odd. In the present instance the left hand is supposed to hold the odd number 33, though unknown by the enquirer. In drawing them out by 1 at a time, as it is known there must be a remainder of 1, the number 1 is suspended at first as it is said in the text, 1 *is suspended to represent the* 3 *powers*. The straws are then drawn in so many successive operations by 2, 3 and 4 at a time, which give respectively the remainders 1, 3 and 1, and these are not put down in three parcels. Making the suspended 1, the first parcel, we have then the following numbers:—

Use Numbers - - - - -	12	24	4	9
Parcels - - - - - - -	1	1	3	1

Multiply these parcels by the respective Use Numbers and the Full Numbers are obtained.

Full Numbers - - - - -	12	24	12	9

Adding together these 4 numbers gives 57, from which subtract the Extension Parent 12 as many times as it will admit, and there is a remainder of 9, which make the dividend, and divide it by 3 the Extension Measure, when the quotient 3 is the junior male, and represents the single stroke symbol.

In this number by changing the odd number in the left hand different symbols might be obtained. 1, representing two whole strokes; 2, representing one broken stroke; 3, one whole stroke; and 4, one whole and one broken stroke. Such was the means employed in former times for diving into futurity; the various diagrams of Fo-he being thus obtained were supposed to set forth the destiny of enquirers. Some knowledge of the Yih King is necessary to enable one to understand these diagrams, which are evidently the relics of a very ancient system of divination.

The 2nd problem is to find the epoch of conjunction of the terms of concurrent cycles of time. The question is given as follows:—

Let the solar year be equal to 365¼ days, the moon's revolution 29$\frac{43}{81}$ days, and the *Kea-tsze* 60 days. Suppose in the year A.D. 1246, the 53rd day of the *Kea-tsze* or sexagenary cycle of days is the 1st of the 11th month; the 57th day of the *Kea-tsze* is the winter solstice or 1st day of the solar year; and the 1st day of the *Kea-tsze* is the 9th day of the month. Required the time between two conjunctions of the commencement of these three cycles; also the time that has already elapsed, and how much has yet to run. *Ans.* The time between two conjunctions, 18,240 years: 225,600 months: 6,662,160 days: number of years already past 9,163: number of years unexpired, 9,077.

The 3rd problem relates to the calculation of labour; 4 companies of men varying in number being engaged in raising an embankment; each company has an equal portion of work allotted to it; the amount of the work is not stated; but the force of each company, and the quantity left unfinished by each company after the last full day's work are given, from which it is required to find the gross amount of the labour performed.

The 4th problem supposes 7 treasuries, each possessing an equal sum of money originally, but being continuously reduced by daily drafts differing in amount, on the respective funds; the original stock and the number of days which the exhausting process has gone on in each, are both unknown; from the known daily drafts and the remainders it is required to find the original sums.

The 5th problem gives 3 agriculturists, having each an equal quantity of grain to dispose of; which being sold at 3 different places according to different measures, the respective surplus quantities over the full measures being given, it is required to find the whole amount.

The 6th problem supposes 3 companies of troops proceeding to the capital, the daily rate of each, and the hours of the day at which they arrive being given, to find the original distance.

The 7th problem refers to couriers of different speed, the daily rate of travelling being given, to find what would be the next place on the road where both would halt for the night.

The 8th problem is on erecting the basement for a building, with one of 4 different kinds of bricks, which the builder is at liberty to select at will; the dimensions of the several bricks are given, with the surplus or deficiency in the gross dimensions, from which it is required to find the dimensions of the erection.

The 9th problem is as follows:—

A report being raised that 3 rice bins each containing the same amount have been robbed, the original quantity is not known, but it is found that in the left hand one there is still 1 *ho* left; in the middle one, there is 1 *shing* 4 *ho* left; in the right hand one there is 1 *ho* remaining; the thieves being caught, A confesses that he took a horse-ladle at night and filled it several times out of the left hand bin, putting the contents in a bag; B confesses having hastily taken a wooden shoe several times full, out of the middle bin; C says he took a bowl and filled it successively out of the right hand bin. Examining the three vessels the horse-ladle is found to contain 1 *shing* 9 *ho*, the wooden shoe, 1 *shing* 7 *ho*, and the bowl, 1 *shing* 2 *ho*. What is the amount of rice lost, and how much did each take? Ans. Lost, 9 *shih* 5 *tow* 6 *shing* 3 *ho*. Stolen by A, 3 *shih* 1 *tow* 9 *shing* 2 *ho*; B, 3 *shih* 1 *tow* 7 *shing* 9 *ho*; C, 3 *shih* 1 *tow* 9 *shing* 2 *ho*.

The second division of Tsin's work is on the calculation of astronomical terms, which are also worked out by the *Ta-yen*. The 1st problem is how to calculate the 氣 *Ki*, "Time from the Winter Solstice to the end of the *Kea-tsze*" for any given year. The 2nd is to calculate the 閏 *Jun*, "Time to the Winter Solstice, from any previous point in the 11th month," for any year. The 3rd is on the computation of the various terms (23 in number) requisite for adjusting the inequalities of the annual, lunar and diurnal revolutions, reduced from a period of 7,848,138 years. The 4th is on calculating the inequalities of the apparent motions of the planets. The 5th is on the comparative length of the shadow on the sun-dial The remaining four questions of this division, on measuring the fall of rain, and the fall of snow, do not properly belong to the *Ta-yen*.

At a time when astronomical instruments were far from having attained the precision of the present day, and observations were at best but comparatively rude, it will be seen that the above calculus was one of considerable importance, as enabling the astronomers, by a kind of dead reckoning to fix the length of the year and the various astronomical periods.

This appears to be the formula, or something very like it, which was known to the Hindoos under the name of the *Cuttaca*, or as it is translated "Pulveriser,"* implying unlimited multiplication, which is not far from the meaning of the *Ta-yen*, or "Great Extension." The process with its results, as found in the mathematical works of India, has engaged much attention in Europe, and given rise to some singular conjectures as to the antiquity of the science.

* See *Edinburgh Review*, November, 1817; Art. Arithmetic and Algebra of the Hindoos.

Considering the long period that the study of mathematics had been cultivated among the Chinese, one cannot feel surprised at their having attained a respectable proficiency in the use of numbers, while yet the science had scarcely obtained a footing in England; nor would it be unreasonable to expect a much higher stage of development than actual evidence goes to prove. From the days of Chow King downwards, every age had furnished its quota of professors, each for the time looked up to by their respective disciples as master of the science *par excellence*; but the extent of the various improvements on which they severally established their fame, merely amounted to matters of detail, while all paid homage to the *Kew-chang*, in endeavouring to throw new light on its time-honoured formulæ, or as they would say, to restore it in some degree to its pristine lustre.

The close of the thirteenth century, however, brings to our notice an innovation on the long-prevalent monotony. At this period we find a grand step made toward the theory of analysis, in the publication of the 立天元一 — *Lih-tien-yuen-yih*, "Setting up the Celestial Monad," a new branch of arithmetic, which may with propriety be termed the Chinese algebra; as indeed the identity has been clearly seen and stated by native authors several centuries later, when the European algebra was introduced by the Roman Catholic missionaries. It is somewhat remarkable that we find this branch of science introduced almost contemporaneously by three different authors, living far apart, under different monarchies, and apparently unknown to each other. In their works there is not the slightest reference to each other, and it is to be regretted that we have not some explicit detail of the circumstances which gave rise to their several productions. Each has treated the subject in a different manner, and seems to have concentrated his force on a part which is less dwelt on by the others. The first which appeared before the public was the work of Tsin Kew-chaou, alluded to above, in which the Monad as a symbol of an unknown quantity, is employed in the *Ta-yen*: but the illustration of its advantages there is so feeble, that were the name omitted, one might easily pass it by without observing a new germ in the calculus. The capabilities of the element, however, expand as he approaches the subject of Evolution, and we find him resolving equations of the

6th, 7th, 8th degrees and upwards, with the greatest freedom and simplicity imaginable. Passing over that for the present, we shall find in the work of the next author Li-yay Jin-king, some elementary details, better calculated to elucidate the theory. In the preface to the "Mirror of the Mensuration of Circles," he tells us that from his youth he had given himself to the study of the 洞淵九容 *Tung-yuen-kew-yung;* but as modern native authors seem quite at a loss to know what that can be, the information is of little practical value.

In the *Tien-yuen-yih*, unity is employed as the representative of an unknown number; this being combined with an extension of the theory of local value, in order to represent the successive powers of the Monad or unknown number. The Monad has the character 元 *Yuen* written by the side of it, to distinguish its place in the column. Immediately below the Monad is the place for the natural number, which is marked by the character 太 *Tai*, implying that it is the place of 太極 *Tai-kieh*, or extreme limit. Immediately above the Monad is the square; next above is the cube; again above, the fourth power, and so on upwards *ad infinitum*. Thus the equation $x^3 + 15x^2 + 66x - 360 = 0$ would be written—

丨	1 Cube of Monad.
丨𠀋	15 Square of Monad.
丅上元	66 Monad.
川丅〇太	—360 Natural Number.

In the above it is seen that the cube, square, &c., are all indicated by their relative position with respect to *Tai*, the characters being used only to express the co efficients. In practise the character *Yuen* is omitted when *Tai* is used; or if *Yuen* be used *Tai* is omitted. It is not a little remarkable, that while it has been gravely asserted by most respectable authorities in Europe, that the Chinese are ignorant of the meaning of local value, we find here on the contrary, that they have pushed the principle to a degree of refinement unpractised in the west. It may be noticed, too, that instead of the old form of writing the equation used in Europe, $x^3 + 15x^2 + 66x = 360$, the method invented by Hariot, of placing all the significant terms on one side, is precisely that used by the Chinese some five centuries earlier; and although in itself but a variation in algebraical language, yet it is said by De Morgan to have been the foundation of most important branches

of the science.* In Tsin's original work, positive and negative numbers are distinguished by the former being in red ink, and the latter in black; and this custom seems to have been in use long before his time, for we find Lew Hwuy referring to it in the sixth century. It is said to represent the bamboo tally numerals used in ancient times. Li Yay was the first to introduce the diagonal stroke drawn through the right hand figure, as above, which has been used ever since. The principle of the *Tien-yuen*, as given by these writers, consists in expressing a compound numerical quantity called the 寄左 *Ki-tso*, containing the unknown number involved to any degree, which term shall be equal to a given natural number, called the 同數 *Tung-soo*, or 又數 *Yew-soo*. These two quantities being amalgamated, the resolution of the equation brings out the value of the Monad or unknown number. Multiplication by the Monad is accomplished by moving all the terms up one stage in the column, if by the square of the Monad, they are moved up two stages; for the cube, three stages, and so on. If any of the places from *Tai* upwards happen to be left blank, they are supplied by cyphers. Of course division is the inverse operation to the above, every term in the column being moved down a stage, two stages, three stages, &c., according to the power of the divisor; the place next below *Tai* is the square root of the Monad; next is the cube root; biquadrate root, &c., all follow in succession.† After the amalgamation of the two equivalents above mentioned, the designations which the various places in the column had retained during the operation, are all effaced, and the order of the series inverted, the lowest term in the column being moved to the top and *vice versa;* the upper term then becomes the 實 *Shih*, or sum of all the others; if there is only one more term, it is called 法 *Fa*, the divisor; if there are 2 more, the second is called 方 *Fang*, or 從 *Tsung*, and the lower 隅 *Yu;* for any greater number of terms, the *Yu* always remains at the bottom, and the additional terms are placed between it and the *Fang*, with the name of 廉 *Lien*, according to their number beginning from *Fang*, as 1st *lien*, 2nd *lien*, &c.

* "On the study and difficulties of Mathematics," by Professor De Morgan, p. 12.

† For the sake of simplicity, 1 is assumed as the co-efficient of these several powers, but it is obvious the principle is the same, if any other numbers be used.

Having the various terms thus arranged, the unknown number is then released by a simple process called by Tsin 玲瓏開方 *Ling-lung-kae-fang*, "Harmoniously Alternating Evolution," the knowledge of which in Europe, is of very recent date. One example taken from a great number in Tsin's work, will best illustrate this. It is required to extract the root of $-x + 1534464x^2 - 526727677600$, or to find the value of x.

720	商 *Shang*. Value of x, the Monad.
—526727577600	實 *Shih*.
—14940217600	
14940217600	
0	方 *Fang*.
731124800	
776249600	
747010880	
1534464	上廉 *Shang-lien*.
1044464	
64464	
—1405536	
—1461936	
0	下廉 *Hia-lien*.
—700	
—1400	
—2100	
—2800	
—2820	
—1	隅 *Yu*.
—1	

In the above example, the several terms are set down with the Chinese names *Shih*, *Fang*, &c., against them, the units in each being 2 places more to the left than in the term above it, because there is found to be 3 figures in the root. The first figure of the root being 7, is set down at the top. The *Yu*—1 is then multiplied by this 7, and the product added to the *Hia-lien* 0, regard being had to the place in the column, which gives—700; the *Hia-lien*—700 is then multiplied by 7, the product being added to the *Shang-lien* 1534464,

still preserving the same place in the column, gives 1044464 ; again this is multiplied by 7, and the product added to the *Fang* 0, gives 731124800 ; this multiplied by 7 and the product combined with the *Shih*, leaves—14940217600, &c. The second figure in the root being found to be 2, the same process is repeated, moving all the terms to the right 1, 2, 3, &c. places.

In this operation, the reader will at once detect the famous theorem of Mr. Horner, "for solving Equations of all orders," first published in 1819 ; of which De Morgan says, that it is a "method which must place its author among those valuable inventors, who find out simple adaptations which have been overlooked by their predecessors,"—from such a source, no mean commendation. It appears some have thought proper to dispute the right of Horner to the invention, and it will perhaps be an unexpected occurrence to our European friends, to find a third competitor coming forward from the celestial empire, with a very fair chance of being able to establish his claim to priority. However this cannot detract in any degree from the merit of Horner, whose right is doubtless well grounded. In the above example, the numbers which are added to the several terms are not set down, but merely the successive results with a line between ; in the original, where a negative number is combined with a positive, or a positive with a negative, these are both set down ; but as the rationale of the process will be quite clear to any one who is familiar with Horner's Method, the extra numbers are omitted here, to avoid prolixity. The original is accompanied with very minute letterpress description of every step in the process.

We give for the sake of comparison, the same sum worked out according to Horner's directions.

—1	0	1534464	0	526727577600(720
	—700	—490000	731124800	511787360000
	—700		45124800	
		1044464		14940217600 ;
	—1400	—980000	776249600 ;	14940217600
	—900		—29238720	
		64464		
	—2100	—1470000	747010880	
	—700			
		—1405536 ;		
	—2800 ;	—56400		
	—20			
		—1461936		
	—2820			

Although Tsin is the first author in which we find this rule fully developed with regard to compound equations, yet it should be observed that Yang Hwuy, a contemporary writer, in his analysis of the *Kew-chang*, gives precisely similar rules, though unaccompanied with examples, for the extraction of the square and cube roots, called 增乘方 *Tsang-ching-fang*, "Accumulating Involution;" these are quoted from one 賈憲 Kia Hien.

At the beginning of the work of 朱世傑 Choo Shi-ki, the third author above alluded to, the following table of the "Ratio of the *Liens* in the involution of numbers, up to the 8th power," is given; not as anything new, however, for it is denominated the "*ancient method;*" but at what time it was first discovered, we have no sufficient date to determine.—

						1	Original sum.	
					1	1	Factors.	
				1	2	1	Square.	
			1	3	3	1	Cube.	
		1	4	6	4	1	Biquadrate.	
	1	5	10	10	5	1	5th Power.	
1	6	15	20	15	6	1	6th Power.	
1	7	21	35	35	21	7	1	7th Power.
1	8	28	56	70	56	28	8	1 8th Power.

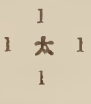
A slight examination will enable any one to understand the mechanical structure of this table, which it is clear might be carried to an unlimited extent. Having already attained such a dexterity in dealing with the higher powers, the transition from this to Horner's Method was an easy and almost natural consequence.

Choo Shi-ki published his 四元玉鑑 *Sze-yuen yuh-kien*, "Precious Mirror of the Four Origins," about the year 1303: in which he makes a decided step in advance of his contemporaries, by using the Monad for known as well as unknown quantities. Four several Monads are used, which are styled respectively, Heaven, Earth, Man and Thing. The three first are generally (not necessarily) employed to designate known quantities, and the last, 物 *Wuh*, "Thing"* for the unknown quantity. Here again we

* "The Persians and Arabs employed the word answering to 'thing' in their language for the unknown quantity, and the Italians adopted the word 'cosa' for the same purpose: hence algebra came to be called the *Regola de la Cosa*, in Italy, and the *Cossike Art* in England." Penny Cyclopædia, vol. I, p. 325. The coincidence here is curious.

must yield precedence to the Chinese, for until the time of Vieta, who lived in the 16th century, arbitrary representations of numbers were never used in Europe for anything but quantities sought The *Tien-yuen*, or Heaven, is written below *Tai*, the powers increasing as they descend; Earth is written on the left side of *Tai*, the powers increasing as they recede from *Tai* in a lateral direction; Man is written on the right side, the powers increasing towards the right; and Thing is written above, the powers increasing as they ascend.

Thus the four simple Monads or $a+b+c+x$ are written in the following form :—



The square of the above, or $a^2+2ab+2ac+2ax+b^2+2bc+2bx+c^2+2cx+x^2$, is as follows :—

A very little practice is sufficient to render any one perfectly familiar with the several terms of this algorithm. The left being the side for the Earth Monad or b, the 1 removed 2 stages from *Tai* is b^2; in the next column, the upper 2 standing opposite the place for the Thing Monad, signifies twice the product of Earth and Thing, or $2bx$; the lower 2 standing opposite the place for the Heaven Monad, signifies twice the product of Heaven and Earth, or $2ab$; the 2 standing diagonally against *Tai*, indicates twice the product of Earth and Man, the 2 Monads in the same horizontal line, or $2bc$; the other diagonal 2 above *Tai* is twice the product of Heaven and Thing, or $2ax$, &c. The operations connected with this formula are as simple as in the *Tien-yuen*, except it be with regard to multiplication, and even in that, the apparent intricacy is more imaginary than real, the several columns being taken

separately and the products added together afterwards. The process of amalgamation and reduction is carried on till all the columns are gradually reduced to one, when the root is extracted the same as before.

Notwithstanding the advantage presented by the *Tien-yuen*, it does not seem to have been cultivated to any great extent by subsequent authors during the Yuen and Ming dynasties. We find it employed by Ko Show-king in the construction of his new system of astronomy, the 授時歷 *Show-shé-lih*, which was used throughout the Yuen dynasty. In the middle of the 16th century 唐順之 Tang Shun-che revised Li Yay's "Mirror of the Mensuration of Circles," and added an elucidation in detail of the various problems; but this afterwards fell into the hands of 顧應祥 Koo Ying-tsiang, a self-taught mathematician, who being ignorant of the principles of the *Tien-yuen*, cast aside Tang Shun-chi's addenda, and published the original text with a series of rules, in which the true meaning of Li's work is very much lost sight of. Ko Show-king's work on "Arcs and Versed-sines" was also republished by this author, the principles of *Tien-yuen* being alike misunderstood and disregarded. After this time we do not hear of any one during the Ming dynasty giving attention to the subject; and the knowledge of it is said to have been preserved by a "mere thread" to subsequent times.

In the reign of Kang-hi, towards the end of the 17th century, a treatise on algebra, 借根方 *Tsié-kun-fang*, as it was then known in Europe, was composed and laid before the emperor by some of the foreigners engaged in the Astronomical Board. The name of the author has not been preserved in connection with his work, but it is clear he could have had no knowledge of the *Tien-yuen*. We find this document made use of in the *Leuh-lih-yuen-yuen*, which was prepared by imperial authority during the same reign, but as it is there presented, it does not show any advantages superior to the *Tien-yuen*, and had the imperial counsellors been familiar with the latter, it is probable it would not have been omitted in the work. A strange mistake has arisen in connection with this branch of the science, probably arising from some faulty wording in the original memorial; for the books that take notice of it, say that "in Europe it is known by the

name of 阿爾熱巴拉 *A-urh-je-pa-la*, 'Algebra,' which word being translated means, 'Rule derived from the East,'" and eking out this misconception in true Chinese style, they say, "the people of the West thus acknowledge that it is of Chinese origin." That the compilers of the algebra in the work just mentioned were ignorant of the *Tien-yuen*, there is strong reason to believe, from the fact that the technical terms employed are all different. Thus instead of *Tien-yuen-yih*, they say 一根 *Yih-kun*; instead of *Ching* and *Fow*, they say 多 *To* and 少 *Shaou*; for *Tung-soo*, they use 等數 *Teng-soo*, &c. In extracting the roots of equations, the former has clearly the superiority.

No arbitrary symbols are used in the *Tsiéy-kun-fang*, but the designation of the several powers are set down against the respective co-efficients; this, however, is not absolutely necessary, for the terms may be indicated by position the same as in *Tien-yuen*; they are written horizontally instead of being in a perpendicular column.

In the beginning of the 17th century the study of the *Tien-yuen* was revived by Mei Wuh-ngan in a work called the 赤水遺珍 *Chih-shwuy-i-chin*, "Pearls dropped in the Red River,"* in which he institutes a comparison between that and the *Tsiéy-kun-fang* which had been introduced by the Europeans. Since that time the subject has engaged much of the attention of students, among whom the most famous who have written, may be mentioned 李銳 Li Juy and Chang Tun-jin, both of Soochow, at the end of last century; the former of whom in this 遺書 *I-shoo*, "Posthumous Works," has left some valuable details on the science. Among other subjects, he treats largely on the number and ratio of roots real and imaginary to any equation, and the method of finding the same; the latter has published a number of the most important ancient works on arithmetic, illustrating the various formulæ at great length, by means of the *Tien-yuen*. A later writer, 張作楠 Chang Tso-nan, in a mathematical compendium styled 翠微山房算學 *Tsuy-wei-shan-fang-swan-heo*,

* This singular title bears allusion to a tradition respecting the ancient sage Hwang-ti, who, it is said, while out on a pleasure excursion on the Red River, in the neighbourhood of the Kwan-lun mountains, accidentally dropped some valuable pearls in the water, where they lay for a long time, but were ultimately regained.

"Mathematics of the Lagerstræmia Hill Institution," annexed to the division on Plane and Solid Mensuration, gives a supplementary section, on the art of using the *Tien-yuen*, but there is little original matter in his work. In the same work, the 4th volume on the Mensuration of Solids treats of the *Tsiéy-kun-fang*; this last form, however, seems to have received but little favour from native mathematicians.

An edition of the "Precious Mirror of the Four Origins" has been recently published at Yang-chow with minute illustrations of the whole text, and three volumes of rules, by 羅茗香 Lo Ming-hiang, in which he enters into an elaborate and interesting detail of the fundamental principles of the science. This author has likewise published a number of smaller works, showing the application of *Tien-yuen* to the trigonometrical canon, astronomy, &c. These last and many other works of a kindred character have been published at the expense of Yuen Yuen, who is well known to foreigners by his formerly having been Governor of Canton, and to natives by his munificent patronage of the arts and sciences.

The exact sciences had evidently been in a declining state from the commencement of the Ming dynasty, down to the time of the arrival of the Romish missionaries. The consequences of this neglect were beginning to be felt in the confusion that was taking place in the calculations of the Astronomical Board. Mathew Ricci, the first who arrived at Peking, soon turned his attention to this subject, and translated a treatise on European arithmetic as a preliminary step, which was afterward revised and published by 李之藻 Li Chi-tsaou, a Christian mandarin, under the name of 同文算指 *Tung-wan*-swan-chi*, "Guide to Arithmetic in the Common Character;" this comprehended the common rules as they then stood in Europe, beginning with Notation and reaching to the Rule of Three. Schaal and his coadjutors, by their labours did much to introduce the knowledge of European mathematics, and published some works of great importance on the subject. The compilation of the *Leuh-lih-yuen-yuen* in the reign and under the special supervision of Kang-hi was an undertaking worthy of the monarch who conceived the plan.

* This title has reference to the 中庸 *Chung-yung*, Chap. 28, Sect. 3.

In it various desultory efforts of preceding writers were wrought into a harmonious whole, while their works were thus placed on such a standing as would ensure their most extensive usefulness. As the publication of this work may be the science, it will not be amiss to give an outline of the contents of the 3rd division of it,* called the 數理精蘊 *Soo-li-tsing-wan*, "Repository of the Subtleties of the Principle of Numbers," which treats entirely of the abstract sciences, and which is at the present day the authorized guide for the calculations used in the Astronomical Board. It is divided into 2 Parts; the first comprehending 5 volumes treating on the theory of quantity The 1st volume commences with an enquiry into the origin of the principle of numbers, in which, true to the Chinese philosophy, it conducts us quietly up to the time when the ancient sage Fo-hi saw the dragon horse emerge from the Yellow River with the scheme of decimal notation portrayed on his back. This chart is then given and also another held equally sacred, which the great Yu is said to have observed on the back of a tortoise which rose out of the river Lo, containing and looked upon as an era in the history of the elements of multiplication and division. The first section of the *Chow-pe*, with a commentary, completes the volume. The next 3 volumes contain a treatise on geometry in 12 books, on a much more diffuse plan than that of Euclid, and consequently deficient in the demonstrations of that author; it embraces planes and solids of every form, and the last book, being on Proportion, gives various mechanical devices for the construction of figures, including the use of the wooden square, the parallel rule, the diagonal scale, the protractor, and the sector, with methods for reducing plans, maps and drawings. The last volume contains what may be called palpable arithmetic, entering scientifically on the theory of calculation, which it illustrates by means of counters, and also by geometrical figures. The 2nd Part treats on the practical application of the various branches of arithmetic, in 40 volumes, and is divided into 5 sections. The first or Introductory section in 2 volumes, includes Tables of Weights and Measures, Notation, Addition, Subtraction,

* A detailed account of the 1st division has recently appeared in the *North-China Herald*, in an article on "The Introduction of European Astronomy at Peking."

Multiplication, Division and Fractions. The second section in 8 volumes on Lines, embraces Proportion, Alligation, Progression, Fellowship, Surplus and Deficiency, Position and Equations. The third section in 12 volumes on Surfaces, contains Square Root, Trigonometry, ancient and modern, the use of the 8 lines of the Trigonometrical Canon, Method for finding the several dimensions of the triangle from each other, Geometrical Mensuration, Measurement of figures of various forms rectilinear and curvilinear, Ratio of various figures contained in the circle, and in which the circle is contained; and Relative ratios of regular ploygons. The fourth section in 8 volumes on Solids, treats on Cube Root, Measurement of bodies of various forms rectilinear and curvilinear, Ratio of various bodies contained in a sphere, and in which a sphere is contained, Relative ratios of regular polyhedrons, Relative weight of various substances, animal, vegetable and mineral, and Piling. The concluding section in 10 volumes treats on Algebra, Miscellaneous problems not embraced in the preceding rules, Logarithms, and 2 volumes in explanation of the use of the Sector. Besides the above, there are 8 supplementary volumes of tables, 2 containing the sines, cosines, tangents, cotangents, secants and cosecants, for every 10 seconds throughout 90 degrees. The 2 next give a table of the divisors of numbers from 1 up to 100,000 to facilitate the computation of logarithms. At the end of every 10th thousand, a list of the prime numbers is also given. The 2 next volumes contain a table of the logarithms of natural numbers from 1 to 100,000 calculated to 10 places of figures. This is apparently a transcript of the table that was published in Holland by Adrian Vlacq in 1628. At the end is a catalogue of the logarithms of the ratios of a great number of mathematical terms, and the relative gravity of various substances. The last 2 volumes have a table of the logarithms of sines, cosines, tangents, cotangents, secants and cosecants for every 10 seconds from zero up to 90 degrees. The very familiar phraseology in which this book is written, no doubt laid open the science to the capacity of many who had hitherto been deterred from the study, by reason of the peculiarly rigid and to some extent quaint character of the ancient books. While there is every possible guarantee for the purity of the style and the absence of barbarisms, it embodies the substance

of all that was really useful in the previous writings of Europeans. The illustrations and explanations to every rule are profuse almost to a fault; the principle of every operation being laid down with great minuteness at the end of the problem. Perhaps the chief objection that this exposes it to, is that it swells out the work to such an extent as to place it beyond the reach of any but a very limited number. Since the publication of the above, a great number of works on the same subject have been constantly issuing from the press, all more or less characterized by conformity to this.

About the year 1633, the theory of Napier's Rods* was introduced in a work presented to the emperor by James Rho, an Italian missionary, then in the Astronomical Board. This theory has been reprinted in several native works under the name of 籌算 *Chow-swan*, "Tally Calculation," in distinction from 筆算 *Pih-swan*, "Pencil Calculation," while the use of the abacus is termed 珠算 *Choo-swan*, Pearl or "Ball Calculation." Some books also give 尺算 *Chih-swan*, Foot or "Sector Calculation," and there is an ancient method called 掌金算 *Chang-kin-swan*, "Finger Calculation."

Although it has been a predominant feeling with most native writers to trace everything of a scientific character to a remote native origin, yet they seem never to have questioned the right of John Napier to the invention of Logarithms; nor have they on that account undervalued the discovery; and even at the present day we find some applying themselves with great zeal to the subject, ignorant of the advances that have been made in the West, since the days that it was first brought before the Chinese. There is one 李善蘭 Li Shen-lan, a relative of Li Juy above mentioned, now residing in Shanghai, who has recently published a small work called 對數探源 *Tuy-soo-tan-yuen*, "Discovery of the Source of Logarithms," in which he details an entirely new method for their computation, based upon geometrical formulæ; which he says in his introduction is "ten thousand times easier than the methods used by Europeans," and that "although *they* can just calculate the numbers, yet they are ignorant of the principle."

* First published in Napier's "Rabdologiæ, seu Numerations per Virgulas" in 1617.

This small indication of self-satisfaction may be very well overlooked, as quite pardonable in one who has had no better aid than that afforded by the *Leuh-lih-yuen-yuen*, and who has here given us, as the result of four years' thought, a theorem, which in the days of Briggs and Napier, would have been sufficient to raise him to distinction.

A mandarin at Hangchow, named 戴鼐 Tai Heu, has also been engaged for some time past on a new method of obtaining logarithms; the blocks for which are now being cut, and it will be before the public in a very short time. It is well known that there are at present many of a similar turn of mind, in different parts of the empire; and it is surely interesting to find these signs of intellectual activity, striving against the difficulties with which they have to contend, and standing out in bold relief from the mass of mental torpor, so characteristically congenial to the institutions of this truly conservative empire. It is true the Celestials are disposed to look with a feeling akin to contempt on the mushroom antiquity of our Western lore; yet it is equally true that a spirit of inquiry still germinates among them, which if fostered by a greater freedom of intercourse, will doubtless tend much to smooth the asperities which now exist, and thus prove mutually advantageous. And may we not hope that the same spirit of inquiry which would lead them to seek after *truth* in science, would also, if rightly directed, teach and prepare them to investigate it in a much higher and more important sphere of knowledge;—even to understand themselves, and the relation they sustain to that great Being, whose name they have preserved,—whose knowledge they have lost.

Philological.

CHINESE LANGUAGE AND LITERATURE.

I. The Colloquial Language.

On the first access of Europeans to some knowledge of the language of China, the most exaggerated notions were formed of its eccentricity and of the difficulty of its acquirement. A more intimate acquaintance, however, tended to dispel the illusion, and to show that much of the singularity that appeared to attach to it was really due to the fact that the written medium preserved the key to that agglutination or word-building, the traces of which in other languages disappeared before those who used them began to put their thoughts on record. It is true the language has very marked peculiarities, as the following observations will show; but these are merely a special phase of the universal development of human speech, arrested to some extent at an early stage by the use of a written character. The neglect of most writers on the language of China to distinguish clearly between the spoken and written forms, has resulted in the most confused notions entertained by those who are not familiar with the subject. That a close analogy exists between the oral and written media of communication cannot be denied; and yet it is equally true that their respective peculiarities are too distinctly marked to admit of the identification of one with the other. It is difficult indeed to believe that people ever spoke in the curt and sententious style of the books, and we have no evidence to prove a closer approximation of the two forms in any preceding age than we find at the present day. Be that as it may, it is easily demonstrable that in the oral medium as we now find it we have to do with a polysyllabic language. That a contrary view should ever have obtained, appears due to the confusion of ideas above referred to.

It has been said, and not without a show of reason, that English is nearer a monosyllabic tongue than the Chinese. The fact that

Chinese happens to be written in monosyllabic symbols does not really affect the question. English might be syllabically written with similar phonograms; and were these to a certain extent at the same time ideographic, the analogy would be perfect. The following sentence is taken at random from Thoms's *Chinese Speaker*: "When a man goes forth to take a walk, his com-pan-ions may be pull-ing and haul-ing at him." Merely separating the syllables in this manner shows the whole theory of Chinese monosyllabism. Now look at the Chinese equivalent of this sentence: *Jin chŭh-lai tsŏw-taou, păng-yew-mun lá-lá-chăy-chăy.* Here the groups connected by hyphens are as inseparable in sense as are those in the English version; and to dissever one of the syllables of *păng-yew-mun*, for instance, would do as much violence to the sense as a similar operation on the corresponding English term com-pan-ions. In the various dialects there are many polysyllabic words for which there are absolutely no characters. The number of syllables in the language is, as might be expected, variously estimated by different authorities. Morrison, basing his system on that of the native dictionary *Woò chay yun foò*, gives 411 simple vocables; but taking into consideration the varieties produced by the aspirates, they amount to 533; and by the further distinctions of the tones, the number is swelled to nearly 1,600. Premare, in his *Notitia Linguæ Sinicæ*, gives a list of 1,331 as the complete catalogue. Gützlaff estimates the whole number at 1,781. Mr. Wade, who has given uncommon attention to the subject for more than ten years, makes the whole number of simple and aspirated vocables in the Peking dialect 420, while by the application of tones the number is increased to 1,454. Probably the number of syllables in the Nanking and western Mandarin dialects may be somewhat in excess of this. The *Fun yùn*, a native dictionary of the Canton dialect, gives the number of syllables when affected by the tones and aspirates as 1,582. Drs. Maclay and Baldwin, in their Foochow dictionary, which is based on the native work *Ts'ĕih lin pa yin ho ting*, a dictionary of the Foochow dialect, gives a list of 495 syllables that may be formed without aspirates or tones; but that is considerably more than the number in actual use. Even admitting that a perfectly accurate estimate could be made, it would doubtless be found that the numbers vary considerably for different parts of the Empire.

Mr. Edkins, who has given more attention to the sounds of the Chinese language than almost any one else, tells us that there has been a considerable secular transformation going on in the pronunciation

from ancient to modern times; many relics of the older language being still preserved in the local dialects. The Mandarin or general dialect of China, which is that of the official class everywhere, is also the common language, with slight modifications, of several of the northern and western provinces. This is marked by the almost entire absence of consonantal terminations, *n*, *ng*, and *rh* being the only ones admitted The provincial dialects of the south, however, have largely preserved the finals *k*, *m*, *p*, and *t*, and in one or other of them nearly all the letters of our alphabet may be found, either as initials or finals. It would be almost impossible to give even an approximation to the number of words in any of the dialects, made up with these syllables. In Stent's vocabulary of the Peking dialect, the most recent work of that class, the author says: "It does not contain all the combinations of characters, but a selection only of useful ones (amounting to upward of 20,000) sufficient for the use of beginners." It should be remarked, however, that while a large proportion of these are polysyllabic words, there are a great number of them also formed by combining two or more words.

No attempt having been made, even by foreign students, to reduce colloquial Chinese to an alphabetic system, the nearest approach has been to lay down two series of letters to represent the initials and finals, by which every syllable may be spelt. The following two lists, with one slight modification, are those adopted by Medhurst in his Chinese dictionary, and are used throughout this article: 20 initials—*ch*, *ch'*, *f*, *g*, *h*, *j*, *k*, *k'*, *l*, *m*, *n*, *p*, *p'*, *s*, *sh*, *t*; *t'*, *ts*, *ts'*, *y*; 55 finals—*a*, *ă*, *ae* *an*, *ăn*, *any*, *ăng*, *aou*, *ay*, *e*, *ĕa*, *ëae*, *ëang*, *ëaou*, *ëay*, *ĕĕ*, *ëen*, *ei*, *eĭh*, *en*, *ĕŏ*, *eu*, *ëuĕ*, *ëuen*, *ëŭh*, *ëun*, *ëung*, *ew*, *ĭh*, *in*, *ing*, *o*, *ŏ*, *oc*, *ow*, *ŭĕ*, *ŭen*, *ŭh*, *un*, *ung*, *wih*, *uy* *wa*, *wă*, *wae*, *wan*, *wăn*, *wang*, *wăng*, *wei*, *wo*, *wŏ*, *wŭh*, *wuy*, *ze*. One of the most important elements in Chinese orthoëpy, and one upon which it is admitted to be most difficult to make one's self understood by a stranger, is the tones. These are certain modulations of the voice, which, applied to a vocable, determine respectively the different meanings of the word so spoken. The tones of the language have a history which shows a gradual change from ancient times to the present. According to Edkins, there was a time when the Chinese did not differ from other languages in the matter of tones. In the time of the Chow dynasty (twelfth to third century B.C.) there were but three, the even, long, and short, or first, second, and fourth of the present series. During the Han period (206 B.C. to A.D. 237) another tone began to make its appearance, the receding,

or third of the category. At some period not earlier than the tenth century, the first was divided into an upper and lower, thus forming a fifth tone; and so was completed the system we find in use now in the midland and western Mandarin-speaking regions. The first or even tone is the musical monotone, neither admitting of inflection in the tone nor variation in the volume of voice. The second or long tone is that rising inflection which is heard in our own language, in every question that indicates some degree of surprise, and in the common expressions *ah! indeed!* The third or receding tone is a monotone like the even, with this difference, that it is an inverted swell, and dies away upon the ear like the tones of receding music. The fourth or short tone may be regarded as an abrupt monotone, like the *a* in the English word *rat*, omitting the final consonant. In Canton all the four tones are divided into upper and lower, forming eight in all. In the Shanghai dialect there are also eight. In Foochow there are theoretically eight tones, but practically only seven. In the neighbourhood of Amoy there are seven; and in the Hakka dialect in Canton province there are only six. The most recent change among the tones is the abandonment of the short in the Peking dialect, where the words of that class are distributed among the other three classes, leaving only four tones now in that region. Gützlaff thus divides the syllables of the language among the four tones: first tone, 533; second, 501; third, 519; fourth, 221. Besides the aspirates and tones, accent is also to be taken into account, as modifying the utterance of a word; particular members of a sentence, according to the dialect, being subject to this modification.

Chinese possesses a grammar, in which all the parts of speech are nearly as well defined as in that of any other language; but depending as it does so much on the value of position among the members of a sentence, it is less flexible than that of inflected tongues. Polysyllabic nouns are formed in various ways, among which are the following: 1. The combination of a root noun with a final particle, as *yin-tszè*, silver, where *yin* is the root and *tszè* the particle; *jĭh t'ow*, sun, where *jĭh* is the root and *t'ow* the particle. 2. Combination of a root noun with a personal suffix, as *choò jîn*, master, composed of *choò*, master, and *jîn*, man; *nûng-foo*, agriculturist, from *nûng*, farmer, and *foo*, person; *t'oó-hoŏ*, butcher, from *t'oó*, butcher, and *hoŏ*, resident; *mŭh-tsĕáng*, carpenter, from *mŭh*, wood, and *tsĕáng*, mechanic; *shwùy-shòw*, water-carrier, from *shwùy*, water, and *shòw*, hand. 3. Combination of a specific noun with a generic, as *pĭh-shoŏ*, the cypress, from

pĭh, cypress, and *shoó*, tree; *lè-yû*, the carp, from *lè*, carp, and *yû*, fish; *tá-lè-shĭh*, marble, from *tá-lè*, the name of a place, and *shĭh*, stone. 4. Combination of a number with a root noun, giving a special meaning, as *szè-paòu*, writing materials, from *szé*, four, and *paòu*, precious objects (*i.e.* ink, pallet, pencil, and paper); *pĭh-síng*, the people, from *pĭh*, a hundred, and *síng*, surnames. 5. Combination of two substantives of allied meaning, as *fung-sŭh*, custom; *ĕ-sze*, meaning. 6. Combination of two antithetic roots, as *tung-se*, thing, from *tung*, east, and *se*, west; *tá-seaòu*, size, from *tá*, great, and *seaòu*, little. 7. Combination of two roots in construction, as *swán-fă*, arithmetic, from *swán*, calculation, and *fă*, laws of; *shoo-fáng*, library, from *shoo*, books, and *fâng*, room. 8. Combination of an adjective and a substantive, as *laòu-shoò*, rat, from *laòu*, old, and *shoò*, the genus *mus*; *lëâng-sin*, the conscience, from *lëâng*, good, and *sin*, heart. 9. Combinations of three, four, and more syllables are not uncommon, as *maè-maé-jîn*, a trader, from *maè*, buying, *maé*, selling, and *jîn*, man; *waé-kwŏ-jîn*, foreigner, from *waé*, foreign, *kwŏ*, country, and *jîn*, man. Adjectives are chiefly distinguished by the addition of the syllable *teĭh* to a qualifying root, as *haòu-teĭh*, good; *pĭh-teĭh*, white. Sometimes they are formed by the combination of two roots of allied meaning, as *lan-tó*, lazy, from *lan*, idle, and *tó*, indolent. Ordinal numbers are formed by prefixing *tè* to the cardinal, as *san*, three, *té-san*, third. The personal pronouns are *wo*, I; *nè*, thou; *t'a*, he or she. The plural is formed by the addition of the syllable *mún*, as *wo-mún*, we. Verbs are formed by the combination of two or more syllables: 1. By a root and an auxiliary, as *nà-laê*, to bring, from *nà*, to take, and *laê*, come; *ké-tĭh*, to remember, from *ké*, to remember, and *tĭh*, obtain. 2. By two verb roots, as *hè-hwan*, to rejoice, from *hè*, to be pleased, and *hwan*, to be delighted. 3. By a verb and a noun root, as *shwŏ-hwá*, to talk, from *shwŏ*, to say, and *hwá*, words. Adverbs are formed in various ways, by the combination of two or more syllables, as *lè-mëĕn*, inside, *i. e.* inner face; *waé-t'ow*, outside, *i. e.* outside head; *ch'a-pŭh-to*, nearly, *i. e.* differ not much; *tsûng-tsëĕn*, formerly, *i. e.* from before; *mán-mán-teĭh*, slowly; *ch'âng-ch'âng-teĭh*, constantly; *pîng-pîng-gan-gan*, comfortably; *yĭh-tse*, altogether, *i. e.* one arrangement; *yĭh-tîng*, certainly, *i. e.* one fixed. Prepositions are sometimes monosyllabic, sometimes dissyllabic, as *t'ûng*, with; *ch'oô-leaòu*, besides. Postpositions are of very frequent occurrence, as *sháng*, above; *hëá*, below; *tsïĕn*, before. Most of the conjunctions of other languages are found in Chinese. They are

either disjunctive, as *hwŏ-shé*, or; or adversative, as *jên-ûrh*, however; or causative, as *ké-jên*, since; or conditional, as *jŏ-shé*, if. Interjections are very numerous in Chinese. To express aversion, they say *pá-leaòu-pá-leaòu*; for sorrow, *k'ò-seĭh-leaòu*; for commiseration, *k'ò-lëên*; for surprise, *ae-yâ*, &c. In composition the adjective precedes the substantive, and the genitive precedes the nominative. The antecedent precedes the consequent; the verb is preceded by the subject and followed by the complement. The gender of persons is generally expressed by *nân*, male, and *neù*, female, followed by the syllable *jîn*, person. For the lower animals *tsze* is used for the female and *heung* for the male. Sometimes also *kung* is used for the male and *moò* for the female. For persons, grammatical number is generally expressed by the plural affix, *mún*, but it is frequently indicated by some expression in the phrase. Such terms as *chúng*, a multitude, *too*, all, *keae*, altogether, *tseuên*, the whole, and *to*, many, indicate the plural number, rendering any affix to the noun unnecessary. The genitive case is generally expressed by the affix *teĭh*; for the dative, *keĭh* is prefixed; the instrumental takes the prefix *pe*; for the ablative, *tsûng* is prefixed; for the vocative, *o* is affixed; for the locative, *tsaé* is prefixed. There are many other syllables used with the same powers. The moods and tenses of verbs are generally understood by the context. Sometimes for the present indicative *joô-kin*, now, may be introduced between the pronoun and the verb. An indication of former time, as *nâ-shê*, at that time, will express the imperfect. The perfect may be expressed by the postfix *kó*, or *leaòu*, or *wân-leaòu*; the negative is formed by placing *mŭh-yèw* before the verb. The pluperfect is formed by putting *è-king* before the verb and *kó* after it. A future is made by placing *tsëang-laê* before the verb; *yaou* is also used. The second person of the imperative mood is made by affixing *pá* to the verb; the third person may be made by placing *yaou-tîng* between the pronoun and verb. The optative is formed by preposing *pa-pŭh-tĭh* or *hăn-pŭh-tĭh*. A negative imperative is made by placing *pëë* before the verb. A salient feature in the language is the use of a class of words that are interposed between a number and the substantive with which it is connected, in the same manner as we use the word head in speaking of so many "head of cattle"; but whereas this phraseology is rare and exceptional in English, it is on the contrary of almost universal occurrence in Chinese. It is difficult to render such terms literally into English; but, to take an example for the sake of illustration, a

Chinese, instead of saying *yĭh-taou*, a knife, or one knife, would say *yĭh-pă-taou*, one handle knife, *pă* being used for most instruments held by a handle. Again, *san-t'eaou shay*, three serpents, *t'eaou* being generally applied to objects where length is the characteristic. *Chang* is applied to objects of the sheet kind, as paper, mats, &c.; *këen* is applied to houses, *lëàng* to carriages, *weĭ* to persons, and *kŏ*, which is of most general application, is used with human beings and inanimate objects indefinitely. There are twenty or thirty such words in extensive use, and a much larger number of restricted application. By European writers they have been variously named, classifiers, numerals, distinctive numeral particles, numeratives, auxiliary substantives, &c.

II. The Book Language.

A knowledge of colloquial Chinese is doubtless an important step toward understanding the written language, as theoretically and in the great leading features they are identical. Yet it is found that, even to a person well versed in one or more of the dialects, it is still necessary to make a special study before he can see his way through the native literature. Not only must he gain a familiarity with a considerable number of the characters, but the grammatical details have so much that is peculiar, that the application required is little if any less than what has been already spent in acquiring the spoken dialect. The more remarkable characteristics are conciseness of diction, the substitution of monosyllables for polysyllables, the employment of special particles, the absence of classifiers, and the more or less extensive use of stereotyped phraseology, consecrated by the usage of antiquity, and in many cases covering some recondite allusion, the resulting idea being such as nothing but the traditional explanation could unfold. The *Shwŏ-wăn* dictionary, which was completed early in the second century of our era, contains 9,353 different characters and 1,163 variants. This number has gone on increasing from age to age since that time, so that a recent edition of that work gives the number of characters in the language as 52,325; and even that number might be considerably increased were all the technical characters and variants included. Buddhism alone, we are told, has added 26,430, but most of these are confined to the works of that religion. The imperial dictionary of Kang-he, the most recent work of the class, gives 43,496; but when the obsolete forms and those to which no sound or meaning is attached are subtracted, the number

remaining and in actual use is reduced to 32,873. It is not to be supposed, however, that the profoundest scholar is master of anything like this number; 10,000 or 12,000 would probably suffice to make an accomplished graduate. An official historiographer under the Han dynasty was required to know 9,000 characters. In the "Canonical Four Books" there are altogether about 2,400, and with the five classics inclusive the number only amounts to about 4,600. With a ready command of 2,000 or 3,000 a person may assume a very respectable status in the literary scale. Gützlaff gives a computation of 24,235 as the number now in use.

Had we no historical data to guide us, an inspection of the structure of this vast mass of characters would naturally lead to the conclusion that they were not the result of a simultaneous effort; and it becomes a question of some interest to know by what incipient stages the system began to shape itself, and on what principle the gradual accretions have been going on from age to age. In reply to such questionings many of the natives have occupied themselves in the most profound researches regarding the characters; and according to the generally received theory, the whole system may be classed in six categories, *i. e.* the *lŭh shoo*, or six classes of characters. The first of these is called *t'ëáng-hîng*, or hieroglyphs. These were termed *wăn*, or figures, being the simplest forms, and were intended to represent visible objects, as ⊙ *jĭh*, the sun; 👁 *mŭh*, eye; ○ *k'ŏw*, mouth. The earliest efforts of this kind are probably all lost sight of for many ages past; but the most ancient examples that have come down to us, in the grotesque figures on the bronzes of the Shang and Chow dynasties, give some faint resemblance to the objects they are intended to represent. The second class is termed *chè-szĕ*, or indicatives, and these show the first tendency toward the expression of abstract ideas, pointing to some property or condition; as 上 *sháng*, above; 下 *hëá*, below; 三 *san*, three. In the third class, *hwŭy-ĕ*, or composites, the first attempt appears to represent figurative ideas, by the combination of two or more hieroglyphs; as 明 *mîng*, bright, formed by the combination of sun and moon. These were termed *tszĕ*, or derivatives, in contradistinction to the simpler *wăn*, or figures. In the fourth class, called *heae-shîng*, or phonetics, we have a still further development of the graphic art, and the first approach toward an alphabetic symbolism. In this division one part of the character is hieroglyphic or ideographic, and the other merely represents the final sound, as in 江 *këang* and 河 *hô*, both signifying river. The same hieroglyph,

氵 *shwuy*, or water, is the generic idea in both and gives no clue to the sound; while in the first the accessory 工 *kung*, work, and in the second 可 *k'ô*, can, are simply phonetic elements, and add nothing to the meaning. The very inadequate resources of the three previous classes to supply the necessities of a moderately developed literature, may be seen in the fact that this class is reputed to contain no fewer than 21,800. These four classes indeed include the whole of the written characters, and the two remaining divisions are merely special applications of already existing forms. The fifth class, called *chuèn-choó*, or deflectives, includes characters which have come to be used for others of the same sound, as 說, used for 悅 *yuĕ*, pleased. The sixth class, called *kĕà-tsĕáy*, or substitutes, contains those characters which, besides the primary and obvious meaning, have acquired a secondary and metaphorical sense, as 長 *ch'ang*, long and a superior; 經 *king*, warp of a texture and classic. These classes, the tradition of which dates back to a considerable antiquity, are not always arranged in this order, which is adopted, with the explanations, from Twan Yŭh-tsaê, one of the most erudite scholars of the present dynasty. Some authors, however, only make the first three classes to affect the forms of the characters, and the other three the sounds. Others again consider all the six classes as referring to the forms.

Apart from the elementary composition of the characters, there has been a great diversity in the modes of writing the same, from ancient to modern times. Some native authors enumerate as many as thirty-six different styles of writing; and the *Yú-che-shîng king foó*, an ode by the emperor Këen-lung, in praise of his ancestral city Mookden, is printed in thirty-two different forms of Chinese seal characters, and as many of the Mantchoo; but the greater part of these are fanciful or imaginary. Some seven or eight will include nearly all the styles that have been in general use. The invention of the earliest known, termed *koò-wăn*, or ancient figures, is attributed to a sage named Tsang-hee; and under this term are included the semi-pictorial forms found on the ancient bells and vases. In the eighth or ninth century B. C. this was replaced by a different style, invented by one Chow-she, termed the *tá-chuen*, or greater seal character; and this in its turn gave way to the *seaou-chuen*, or lesser seal character, accredited to Le-sze, the minister of the famous Che-hwang of the Tsin dynasty (227 B. C.). In these two latter styles much of the pictorial had disappeared. The *Shwŏ-wăn* is a dictionary of the lesser seal character. With the spread of literature, however, and the gradual

adoption of silk for writing on in place of bamboo tablets, the seal characters with their curved lines were found to be too cumbersome. About the end of the same dynasty (206 B. C.) the *le-shoo* or official character was invented by Ching Mo. As the name implies, this was probably used in governmental documents; it is still sometimes employed for prefaces to books. The *hing-shoo* or running-hand is an elegant form of manuscript, especially suited to the hair pencil, which was already in general use at the time of its introduction during the Eastern Han dynasty (A. D. 56–220). The invention is ascribed to Lew Tih-shing. The *ts'aou-shoo* or cursive character is an extremely abbreviated hand, much used in rough draughts and daily transactions. It was introduced about the same date as the preceding, by a scholar named Chang Pih-ying. The *k'eae-shoo* or typographic character is the square-form generally used in books and printed documents, which was introduced about the eleventh century. The three latter kinds are in general use at the present day. Great pains are taken by the Chinese to secure the correct and graceful form of their characters, and the most minute rules are laid down for their formation, both as to the order of sequence and proportions, which are carefully enforced by the teachers. All the characters in the language are reckoned to be made up of the eight elementary parts contained in the character 永 *yùng*, signifying eternal, *i. e.* a dot, horizontal line, perpendicular line, hook, spike, sweep, stroke, and dash. There is a small native work containing ninety-two short rules for writing, illustrated by examples. These examples, with a partial translation, have been published by Davis, in the *Transactions of the Royal Asiatic Society*, vol. I, under the title, "Eugraphia Sinensis."

Dictionaries of the characters are numerous, and, as may be supposed, it was necessary to adopt some artifice in the arrangement of these, in order that by a fixed method any character might be easily discovered in the mass. To effect this, a certain number of distinguishing characters were at an early age selected, to which all the others might be respectively referred. These are termed *pó* by the Chinese, which has been variously translated elements, keys, and radicals. The latter is probably the most convenient term. The number of these radicals has varied in different ages. The *Shwŏ-wăn* has 540; the *Yŭh-pëen*, completed in 523, has 542; the *Luy-pëen*, by Sze-ma Kwang, has 544; in the *Lŭh shoo pùn ŏ*, which appeared early in the Ming dynasty, the number of radicals is reduced to 360; in the *Ching yùn wuy pëen*, published about the beginning of the seventeenth century,

there are 239, and a supplementary class of characters at the end, not referable to any radicals; the *Tszé wuy*, which was published at a later period of the same dynasty, contains only 214; and the two principal dictionaries that have been published during the present dynasty, *Ching tszé t'ung* and *K'ang he tszé teen* (which latter forms the basis of Medhurst's *Chinese and English Dictionary*), have both adopted the number fixed by the *Tszé wuy*. These are divided into 17 classes, according to the number of their strokes. In the 1st class are 6 radicals, each composed of a single stroke; the 2nd class has 23 radicals of 2 strokes each; the 3rd class has 31 of 3 strokes; 4th class, 35; 5th, 22; 6th, 29; 7th, 20; 8th, 9; 9th, 11; 10th, 8; 11th, 6; 12th, 4; 13th, 4; 14th, 2; 15th, 1; 16th, 2; 17th, 1. These for the greater part represent elementary hieroglyphs, and are probably as judicious a selection as could have been made. Gonçalvez has reduced the number of the radicals to 127 in his *Diccionario China-Portuguez*, but it is doubtful if his system will ever extend beyond the work in which it first appeared. Most of the radicals represent generic ideas, and have been classed by Kidd under the following 10 categories; 1st, celestial objects, as sun and moon; 2nd, atmospheric phenomena, as wind and rain; 3rd, human properties and relations, as head and father; 4th, inferior animals, as tiger, bird, and fish; 5th, elements of nature, as fire and water; 6th, terrestrial productions, as wheat and rice; 7th, abstract qualities, as black and bitter; 8th, weapons and utensils, as lance and dish; 9th, verbs, as to walk and to follow; 10th, miscellaneous terms, as error and garments. Under one or other of these heads every character in the language is to be found, and in very many instances the radical gives the generic idea of the special character sought. The radicals do not hold any uniform position in the characters. Some are placed on the right side, some on the left, some at the top, some at the bottom, some in the middle, some on both sides, some surrounding the supplementary part, some embracing the top and right side, some the top and left side, some the left side and bottom, some at one of the corners, and a number of others promiscuously placed, all which must be learned from practice. Many of them are very much abbreviated and altered in form when used in composition, so as scarcely to bear any resemblance to the isolated figures. Under each radical in the dictionary, the related characters are arranged *seriatim*, according to the number of additional strokes; so that having discovered the radical and counted the number of extra strokes, it is in most cases a very simple process to pick out the

character in question. There is a great difference in the number of characters attached to the various radicals. According to the *Tszé wuy*, which contains about 30,000 characters, the 140th radical, *ts'aòu*, herb, has 1,423 under it; the 85th, *shwùy*, water, has 1,330; the 75th, *mŭh*, tree, has 1,230; the 64th, *shòw*, hand, has 1,012; the 30th, *k'òw*, mouth, the 61st, *sin*, heart, the 38th, *neù*, woman, all have large numbers connected with them; and so on through the whole list, the numbers gradually decreasing till we come to the 138th, *kăn*, a limit, which has only five characters under it. The character having the greatest number of strokes is 靐 *ping*, the sound of thunder, the last under the 173rd radical, 雨 *yù*, rain, being a quadruplicate form of 雷 *lûy*, thunder. In some works of a higher class, pedantic authors are in the habit of using strange and obsolete forms, in place of the ordinary characters. In novels and books of light reading many of the characters are so much abbreviated that a special practice is necessary to enable one to read them off with ease. In epistolary correspondence and other writings by the partially educated, it is a very common practice to replace the proper character by another of the same sound without regard to the meaning, thus moving unconsciously a step in advance toward phonetic writing. As it is a point of etiquette to refrain from mentioning the private name of an emperor, it has become customary to avoid writing the characters; and when one occurs, it is replaced by another of the same meaning. Thus the *T'ung-tëen*, a work of the Tang, speaking of the famous Buddhist traveller Fa-hëen, changes the last character *hëèn*, meaning brightness, for the synonymous character *mîng*, because *hëèn* happened to be part of the private name of the emperor Chung-tsung. Sometimes the character is abridged by one or more strokes, as in the name of the Kin dynasty Tartars, who were formerly named Neu-chin; but the private name of the emperor Hing-tsung of the Leaou dynasty containing the character 眞 *chin*, the Chinese historians of the period omitted the two lower strokes, thus forming the character 直 *chĭh*, and they have retained the name of Neu-chih ever since. Sometimes the character is mutilated without changing the sound, as in the case of 甯 *Ning*, part of the private name of the emperor Taou-kwang, which is now commonly written 寧 *ning*, with the same sound and meaning. In more formal documents it is replaced by 甯, a homophonous synonym. A curious illustration of the same practice is found in the *K'ang-he* dictionary. The character 玄 *heuen*, which formed part of the name of the reigning monarch, having been the 96th radical in the *Tszé wuy*

and *Ching tszé t'ung* dictionaries, was promoted to the 95th place in the new dictionary, being the first in the five-stroke class. In common use, as in the name of the idol Heuen-te, it is often replaced by 元 *yuên*. The private name of Confucius was 丘 *Kew*, which in reading the Chinese avoid pronouncing, by saying *mow* ("such a character") instead. In like manner it is considered a mark of filial piety to refrain from writing the name of a parent; and some invariably omit one or two strokes when such characters occur.

The Chinese write in vertical columns, following from right to left, and it is customary in the better class of works to raise the name of the dynasty a character above the other columns; even should it occur anywhere in the middle of a column, that column is abruptly broken off, and the imperial character carried up to commence another, while the sense of the passage is continuous, as if there were no break. The title or functions of the emperor are raised two characters above the other columns, and the titles of the imperial ancestors are raised three characters. In inscriptions and documents, the mention of an emperor is frequently preceded by a blank of two characters' length, as may be seen in the famous Nestorian inscription at Se-gan. The Taiping rebels, in their proclamations, were accustomed to elevate the title of the heir apparent one character, the designation of Jesus Christ, and also the chief Hung Sew-tseuen, two characters, and that of God the Father three characters above the other columns.

The prevalence of monosyllables in the written language has been referred to. Thus, for the word silver, instead of *yin-tszè* of the colloquial, *yin* alone is used; for sun, instead of *jĭh-tow*, the syllable *jĭh* is used; instead of *choo-jin* for master, *choo* is used. For the verb *kĕ-tĭh*, to remember, *ke* is employed; and *hwan*, to rejoice, takes the place of *he-hwan* of the colloquial. Another peculiarity of the written language is the capability of some of the characters assuming the *rôle* of different parts of speech, according to the positions they occupy in a sentence. Thus the same character represents the verb *shĭh*, to eat, and the noun *sze*, food; another represents *yŏ*, music, and *lŏ*, to delight in; *e* in the first tone signifies garments, while the same character pronounced in the third tone means to dress. In classical books we find a character undergoing an analogous change of meaning even without any alteration in the pronunciation; as *laou*, meaning old and to treat one as due to age; also *yew*, young and to treat one as due to youth. This peculiarity extends to other parts of speech also, as *e*, strange and to be astonished.

All the cases of nouns may be indicated by position, and the oblique cases also by certain particles. The genitive is preceded by *che*. The dative is preceded by *yu* or *hoo* following a verb. The accusative is preceded by *e*, *yu*, or *hoo*. The vocative is followed by *hoo*. The ablative is preceded by *yu*, *hoo*, *tsze*, or *tsung*. The locative is preceded by *yu*, or followed by *chung*, *nuy këen*, *che-chung*, *che-nuy*, or *che-këen*. The instrumental is preceded by *e*. Moods and tenses of verbs are generally indicated by the general construction of a sentence, though particles also are sometimes used. Past time is indicated by the prepositions *tsäng*, *chang*, *ke*, *king*, and *e*. Occasionally *tsëang* is employed to mark the future. Pronouns are sparingly used, unless the sense or the rhythm actually requires them. The first person is often replaced by a term of humiliation, as *yu*, the stupid one; while a term of exaltation is used to replace the second person. When the pronoun *yu*, I, has to be written or printed, it is often put in smaller type than the other characters, as a mark of humility; just the reverse of our English practice.

III. Literature.

It has been said that the Chinese have the most extensive literature of any nation in the world; and it is certain that in no other are the records so continuous and complete for a period ranging over 2,000 years. The very earliest fragments that have any claim to genuineness do not extend higher than the first thousand years B. C., and it is not till the latter part of that period that we meet with any noticeable list of authors. The works of Confucius then come before us; also several of the great writers of the school of Taou, some famous moralists and writers on the military art. The mechanical appliances in aid of literature at that time, however, must have been sorely discouraging to authorship. Even several centuries subsequent to Confucius slips of bamboo were still used, on which the characters were scratched or engraved. These were gradually superseded by the silk texture, and in the beginning of the second century of our era paper was invented, the pencil having already been brought to a considerable degree of perfection. More than two centuries before Christ, history speaks of an effort made by the first monarch of the Tsin dynasty to destroy the great body of the existing literature, his decree exempting only writings on medicine, divination, husbandry, and the annals of his own house. The decree was supposed to be executed, and entailed at the same time the death of a great number

of scholars. In 190 B. C. the law for the suppression of literary works was repealed by the emperor of the Han then reigning, and a stimulus was given to learning. The historian of the Western Han, which came to an end in A. D. 24, gives a catalogue of works in the imperial library, comprising classics, philosophy, poetry, military tactics, mathematics, and medicine, consisting of 11,292 sections, by more than 500 authors. Works were then written on scrolls, and continued to be so down to the tenth or eleventh century, when printing came into general use, and the huge piles of manuscript rolls gradually dwindled down to the dimensions of a few antiquarian curiosities. It has frequently been asserted that there is nothing in Chinese books to repay the trouble of learning to decipher them; and in view of the protracted study necessary to acquire a competent familiarity with the subject, there is a certain amount of truth in the statement. It should, however, be noted that the books of the Chinese have not had fair play at the hands of Europeans; and too frequently it happens that, either from want of the requisite attainments on the part of the translator, or from a desire to hold up to ridicule a subject uncongenial to his taste, translations and quotations have been little better than caricatures. At the same time, it must be admitted that some translations have been very favourably received by western scholars, and give the earnest of much that may yet be discovered in this unexplored mine.

In taking a rapid review of the literary productions of the empire, it will be convenient mainly to follow the order and classification generally adopted by native writers, and to commence with what are termed the *King*, or "Classics," which are supposed to have been written by or to have passed under the revising hand of Confucius. These are held in the highest reverence, and looked upon as the standard from which there is no appeal. They are five in number, and four of them at least, there is good reason to believe, passed through the hands of the sage in one form or another. One, the history of his native state, is said to be his own composition; but another, the *Book of Rites*, appears in such a fragmentary state, that it is thought by critics to be a compilation by some scholar during the Han dynasty. The earliest of these, the *Yih-king*, is a veritable mystery. The nucleus of the work is a series of figures composed of whole and bisected lines. These were at first eight in number, and attributed to the legendary sage Füh-he, each consisting of three lines. Ranged in octagon form, these eight trigrams are very extensively used as decorative objects, on dishes, vases, bells, utensils, the lintels

of doors, the gables of houses, the ceilings of rooms, and a numberless variety of other positions, being rated to comprise a vast amount of hidden wisdom. Their names are *këen*, heaven; *t'uy*, vapour; *lê*, fire; *chin*, thunder; *sun*, wind; *k'an*, water; *kăn*, mountain; *kwăn*, earth. These are variously looked upon, as the heads of categories, the rudiments of written language, or symbols of philosophic systems. By squaring the number, 64 were produced, each formed of two of the original trigrams, superposed one on the other, and each one having a separate name. These hexagrams, which are assigned to a later hand, form the themes of so many separate sections in this famous book. Wăn-wang, the founder of the Chow dynasty, while in prison for a state offence, employed his time in studying these symbols, and appended a short text to each, under the name of *T'wan*. These are followed by remarks in detail on the several strokes of each hexagram, which are called *sëang* (figure), and are said to have been added by Chow-kung, the son of Wăn-wang. The additional portion of the work tradition ascribes to Confucius, being a kind of commentary, reflections, and apparently irrelevant remarks on the texts of Wăn-wang and Chow-kung. Although more than 500 commentaries and treatises have been written to elucidate this strange book, it is scarcely saying too much to assert that none of them have succeeded in bringing an intelligible meaning out of it. If there be any meaning at all it is probably a work on divination or some occult art. There is a Latin translation of the *Yih-king* by Père Regis and other Jesuit missionaries (edited by Julius Mohl, two vols., Stuttgart and Tübingen, 1834). The second classic, named the *Shoo-king*, contains a sketch of the ancient history of China, from the twenty-fourth century B.C. down to the emperor Ping-wang of the Chow dynasty, 721 B.C. It appears to have been compiled by Confucius, from the historical remains of the Yu, Hea, Shang, and Chow dynasties; but in the vicissitudes of the earlier ages it has evidently suffered much in its integrity. Tradition asserts that it consisted of 100 chapters as it left the hand of Confucius, but nearly all the existing copies having been consigned to the flames by Che Hwang-te, the book-burner, the now existing copies are the outcome of the mutilated fragments and half-suspected versions bequeathed to posterity by the first three or four centuries of the Christian era. Even in its imperfect state, however, it is a most interesting document, and apart from its historical character, and description of the great flood, it supplies more than hints regarding the principles of government, astronomy, music, agriculture, and other

subjects of great importance to our knowledge of those ancient times. About 150 treatises, exegetical and illustrative, have been written about the *Shoo-king* as a whole or in particular portions. It has been translated into French by Gaubil (edited by De Guignes, Paris, 1770; also in Pauthier's *Livres sacrés de l'Orient*, 1841), and into English by W. H. Medhurst (Shanghai, 1846) and James Legge, D.D. (vol. iii. of *The Chinese Classics*, Hong Kong, 1865). The third member of this pentateuch, the *She-king*, consists chiefly of a collection of ballads used by the people of the various petty states of China in ancient times, selected and arranged by Confucius, to the number of 311, of six of which, however, nothing but the name remains. The book is divided into four parts: 1, odes of the various states; 2, minor odes of the kingdom; 3, higher odes of the kingdom; 4, temple hymns. From these stanzas we get more insight into the life and manners of the people in the early ages than from any other work extant. They are simple in composition, frequently descriptive of rural and domestic life; many are martial odes, with covert political allusions, and hints at the prevailing state of society. Upon this also about 150 illustrative works have been written. It has been translated into Latin by Père Lacharme (edited by Mohl, Stuttgart and Tübingen, 1830), and into English by Dr. Legge (vol. iv. of *The Chinese Classics*, Hong Kong, 1871). The evidence for the *Le-ke*, or "Book of Rites," seems less satisfactory than that for the others. Subsequent to the book-burning merely scattered fragments of the original work were to be found, till Tae Tih, a scholar of the first century B.C., made a collection of miscellaneous pieces, to the number of 214 sections, only a small proportion of which, however, are believed to have belonged to the work of Confucius. He reduced the collection to 85 sections, which has since been known as the *Ta tae le*. This was revised by his nephew Tae Shing, who reduced the whole to 49 sections, in which form it has been called the *Seaou tae le*, and has been transmitted from age to age as the *Le-ke*, and by imperial authority ranks as one of the five classics, though secondary in grade. It is the most bulky of the whole, and is replete with lessons and rules for daily conduct, public and private, bearing throughout the theory that true etiquette is but the manifestation of rectitude of heart. More than 70 works are to be found illustrative of this book. There is a French translation by Callery (Turin, 1853). The *Ch'un-ts'ew*, the last of the five, is the only one actually written by Confucius, being the history of Loo, his native state, from 722 to 484 B.C. As

an incipient effort in the art of history making, it appears to have called forth much admiration and eulogium in early times; but, consisting as it does of a very bald detail of state occurrences, it can scarcely maintain a high position in the judgment of unbiassed critics. There are about 250 works illustrative of this text. (English, "The *Ch'un-ts'ew*, with the *Tso-chuen*," vol. v. of *The Chinese Classics*, by Legge.) Besides the special commentaries on the separate classics before referred to, there are about 80 exegetical works treating of all the five. In 1270 a work was published, called *Choo tsze yu luy*, in 140 books, consisting of the discourses of Choo He, as recorded by several of his disciples. From this Ching Chuen extracted and arranged the philosopher's elucidation of the five classics, which he published in 1725, under the title *Choo tsze woo king yu luy*, in 80 books. The name of Choo naturally gives much weight to this compilation. A sixth classic, under the title *Yŏ-king*, or "Book of Music," is spoken of in ancient times as also the work of Confucius; but it is now lost, and the only vestiges on the subject extant are a section in the *Chow-le* and another in the *Le-ke*.

During the T'ang dynasty a compilation was made under the name of the *Shĭh san king*, or "Thirteen Classics." In this collection three of the commentaries on the *Ch'un-ts'ew* were also admitted to the rank of secondary classics. Of these, the most important and best known is the *Tso-chuen*, by a scholar named Tso, supposed to have been a disciple of the sage. This is a narrative of events contemporaneous with the *Ch'un-ts'ew*, but so fully developed, and so much superior to the latter, that it has been said, "In no ancient history of any country have we such a vivid picture of any lengthened period of its annals, as we have from Tso of the 270 years he has embraced in this work." The other two commentaries, named after their respective authors *Kung-yang chuen* and *Kŭh lëang chuen*, are much less known and read than that of Tso. The substance of both was handed down orally for centuries, but that of Kung-yang was put into writing about the beginning of the Han dynasty, and the *Kŭh lëang chuen* more than a century later. They consist chiefly of scholia and expositions of the text of the classic. A number of works have been written in elucidation of these three commentaries. Besides the "Book of Rites" above noticed, there are two other works of the same order, reckoned among the secondary classics. The *Chow-le*, or "Ritual of the Chow Dynasty," claims a very high antiquity, and has been at various times repudiated, and again accepted as genuine. The evidence now seems

to be in its favour. It contains a full account of the government organization during the Chow dynasty, giving a catalogue of the officers with the functions of each. It is divided into six sections, entitled respectively by the names of heaven, earth, and the four seasons, the last of which, the winter section, was never recovered after the burning of the books, and has been supplied by another ancient document, called the *K'aou kung ke*, or "Artificer's Record." In the *Chow-le* is found the type of the present six administrative boards at Peking. About sixty works have been written in reference to this book. (French by Biot, Paris, 1851; English by Gingell, *The Ceremonial Usages of the Chinese, B.C.* 1121, London, 1852.) The *E-le* appears also to be of very remote origin. The subject matter consists of rites of a more private and domestic character. The book is now little studied or read, although there are about forty works on record treating it in detail. The *Sze-shoo*, or "Four Books" *par excellence*, having long held their place as secondary classics, are now far better known and incomparably more read than any of those above mentioned, being the class books of the schools all over the empire. Foreigners frequently designate them the "Canonical Four Books." The first of these, named the *Ta-hëo*, originally formed part of the *Le-ke*, but was separated from it by Choo Ho, who arranged the collection as it now stands. It consists of eleven chapters, the first of which is called the classic text, being the words of Confucius on the fundamental principles of ruling a kingdom, which he traces to the source of personal self-government. The remaining ten chapters are by his disciple Tsang Ts'an, amplifying by quotations from history the sententious text of the sage. Several versions of the *Ta-hëo* have been published, generally in collections: in Latin, by Ignatius a Costa (with the Chinese text, Keen-chang-foo, 1662; without, Paris, 1687); in English, by Morrison (London, 1812), by Marshman (with the Chinese and a praxis, Serampore, 1814), and by Legge (in *The Life and Teachings of Confucius*, London, 1869); and in French, by Pauthier (Paris, 1837). The *Chung-yung* is the work of Tsze-sze, the grandson of the sage, and is the most profoundly philosophic of the four. It treats of the moving principles of human action, and illustrates the practice of virtue by an ideal perfect man. When all the passions and affections are held in perfect equilibrium, the heart is said to be correct. Besides other editions and translations, the *Chung-yung* has been published by Rémusat in Chinese and Mantchoo, with Latin and French versions (Paris, 1817); and in English by

Legge (London, 1869). The *Lun-yu* consists of a collection of pithy sayings and detached dialogues between Confucius and his disciples and others; apparently reminiscences of the sage and his teachings. There is much in the doctrines laid down calculated to fortify men in the practice of virtue, and we even find the golden rule of Christ expressed by Confucius more than once, though in a negative form. There are some things in it, however, sanctioned by this great teacher, to which a Christian cannot assent. There is a Latin translation in *Confucius Sinarum Philosophus* (Paris, 1687); German, in Schott's collection (Halle, 1826); English, by Marshman (first half, Serampore, 1809), and by Legge (London, 1869). The fourth of the "Four Books" is known by the title of *Măng-tsze*, that being the name of the author, which in European works is Latinized into Mencius. He is said to have been a pupil of a disciple of Tsze-sze, the author of the *Chung-yung*, and flourished during the fourth century B.C. He had much intercourse with the princes and grandees of his time, and appears to have been lively in his character and ready-witted in conversation, ever ready to frown down oppression and tyranny by cutting sarcasm and well-timed parables. His work, which is larger than the three others put together, contains a record of his sayings and dialogues with various characters with whom he had come in contact; the main object of his teaching being to commend the practice of benevolence and integrity. He takes occasion also to aim his shafts at several of the heresiarchs of his time. Although, like many other philosophers in that age, he had a numerous company of disciples, he does not appear to have occupied that high position in the mind of his contemporaries which subsequent generations have accorded him. His work is said to have escaped the general burning, as being considered extra-classical; and it was not for several centuries that it was promoted to the honoured rank it now holds. The Chinese text, with a Latin translation by Julien, was published at Paris in 1824. It has been translated into English by Legge (Hong Kong, 1861). There are 170 or more exegetical works on the "Four Books," and by far the most popular is Choo He's commentary, which is read in the national college of Peking. There is a Latin version of the whole, together with the *Heaou-king* and the *Seaou-heo*, by Noel (Prague, 1711; translated into French by Pluquet, Paris, 1784). The "Four Books" have been translated into English by Collie (Malacca, 1828), and into French by Pauthier (Paris, 1841). The *Heaou-king* is a tract extolling the virtue of filial piety and inculcating

its practice, and is reckoned one of the secondary classics. It professes to be a conversation between Confucius and his disciple Tsang Ts'an, recorded by another disciple. Grave doubts are entertained as to its authenticity by many scholars. They say neither the style nor the doctrine is in keeping with its pretensions. Thirty or more exegetical works have been written on it. Besides the Latin and French translations before mentioned, there is a French one in *Mémoires concernant les Chinois* (Paris, 1779), and an English one by Bridgman in the *Chinese Repository* (Canton, 1836). The *Urh-ya*, the last of the thirteen classics, is a kind of dictionary of terms used in the classical and other writings of the early ages. Tradition ascribes the authorship to Tsze-hea, the disciple of Confucius, and the nucleus of it is even said to have come down from Chow-kung, regent of the empire in the beginning of the Chow dynasty. The work is divided into nineteen sections, according to subjects, as—1, Ancient Terms; 2, Words; 3, Phrases; 4, Kindred Relations; 5, Houses; 6, Utensils, &c.; each term being found with a brief explanation in its own special category. The oldest commentary, by Ko Po, a scholar of the fourth century, is generally published with the text. Other works have been written on the *Urh-ya*, but none of equal reputation with this. This is the type of a class of works which, though admitted as appendages to the classic division, are yet put in the lowest grade. Another work of some reputation, arranged on the same principle as the *Urh-ya*, is the *Lŭh shoo koo*, written about the close of the Sung dynasty. Although there are many cyclopædias arranged on this principle, there are comparatively few works that we should call dictionaries. A more general plan is to arrange the characters under a fixed number of radicals. Several of the best known lexicons on this plan have been already mentioned. The Chinese were first initiated into the science of analyzing sounds by the Hindoo missionaries in the fifth century, and the *Yŭh pëen* is the earliest extant work in which we have the system of syllabic spelling applied. This system consists in the employment of two characters to represent the pronunciation of a third, the exponent characters being followed by 切 *ts'ëë*, implying bisection. The initial of the first exponent is then to be prefixed to the final, including the tone of the second. The result is the sound of the character required. From that time began the practice of indicating the sounds of characters in the dictionaries. A third class of dictionaries is those in which the characters are arranged throughout according to the sounds; a certain number of

symbols being selected as finals, to which all others with the same finals respectively are referred. These dictionaries are first divided into four parts, corresponding to the four tones, and subservient to these is the arrangement of the finals. The earliest of this class extant is the *T'ang-yun*, a production of the eighth century, with a system of 206 finals. The *Tseĕ yun che chang t'oo*, a small work by the historian Sze-ma Kwang, is the first of this class in which the Hindoo system was adopted. He employs 36 initials, under which are arranged, according to the four tones, 3,130 characters. The *Le poo yun lĕŏ* was issued under imperial patronage in the eleventh century, to rectify the disorders that were creeping into the rhymes at the examinations. The original copy had only 9,590 characters, but in an augmented edition subsequently published the number amounted to 13,647. The *Woo yin tseĭh yun*, which appeared about the end of the twelfth century, contains 53,524 characters, and reduces the number of finals to 160, under each of which the characters are referred in order to the 36 initials. In the thirteenth century, Lew Yuen of Ping-shwuy again reduced the number of finals to 107, and his system with slight variations has continued in use to the present time. The *Hung woo ching yun*, which was published under the immediate patronage of the first emperor of the Ming dynasty, reduces the number of finals to 76. Although this work is well known, it never came into general use. About the commencement of the present dynasty, Koo Yen-woo, a scholar of great talent and acquirements, wrote several small works of this class. P'wan Luy, one of his pupils, was the author of the *Luy-yin*. In this he makes a selection of 147 finals, and increases the number of initials to 50. He treats largely of the modern changes in pronunciation. The *Woo chay yun suy*, published in 1592, is arranged according to the 106 finals. The *Yin yun ching go* is a concise work of modern date, arranged according to 65 finals. The *Woo chay yun foo*, published early in the eighteenth century, has 36 initials and 128 newly selected finals. The *Woo fang yuen yin*, a dictionary of the Mandarin dialect, published in 1710, has 12 initials and 20 finals. The *Pei wăn yun foo*, compiled under the special superintendence of the emperor and published in 1711, is arranged according to 106 finals distributed among five tones. It is usually bound in 110 thick volumes, and is probably the most extensive lexicon ever published. The quotations from preceding works are extremely numerous and complete, far exceeding anything of the kind that had been done before. Works of this class are

very numerous, and much more used by students than the radical division.

In the number and extent of their histories the Chinese stand unrivalled. Their dynastic history alone is a marvel. During the Sung dynasty the *Seventeen Histories*, including so many dynasties, were published in a single work. Under the Ming a corresponding work was issued, with the title of the *Twenty-one Histories*; and during the present dynasty the *Twenty-two Histories* and *Twenty-four Histories* have successively appeared. These are the work of nearly as many authors, the history of each dynasty being generally written in the period of its successor, with all the advantages of access to the national archives; and several of the authors stand high in the literary scale. The last named collection, beginning with the *She ke*, and ending with the *Ming she*, or "History of the Ming dynasty," numbers in all 3,264 books or sections, and averages probably two or three of these books to a volume. The whole are written on a generally uniform plan, though each differs somewhat in detail, and there is much diversity in the style of execution; Pan Koo's *Ts'ëen han shoo*, or "Book of the Former Han," for instance, being looked up to as a model, while scholars are lavish of their censures on the historian of the Sung. As a rule, each history is divided into three sections: 1, "Imperial Records," containing a succinct chronicle of the several reigns of the dynasty; 2, "Memoirs," consisting of a succession of articles on astronomy, rites, music, jurisprudence, political economy, state sacrifices, uranography, meteorology, geography, and literature, giving the state of these various subjects during the dynasty; 3, "Narratives," in which are included biographies of all persons of eminence, and short historical statements regarding foreign countries. The *She ke*, by Sze-ma Ts'ëen, in 130 books, the first of the series, is much praised for its style, and is exceptional in its arrangement. Commencing with the mythical period of Hwang-te, it reaches down to the emperor Woo-te of the Western Han. A great part of the materials had been collected by Sze-ma T'an, the father of the author. It is divided into five sections: 1, imperial records; 2, chronological tables; 3, eight treatises on rites, music, harmony, chronology, uranography, sacrificial service, watercourses, and weights and measures; 4, genealogical history of the princes; 5, narratives of persons and countries. Much of the original work is lost. There are double histories, the old and the new, of the Tang dynasty, and also of the five dynasties succeeding, both of which

are admitted into the standard collections. The new histories of both these are by Gow-yang Sew, a scholar of established reputation early in the Sung. In the *Sin woo tae she*, or "New History of the Five Dynasties," he has departed somewhat from the beaten track, both as to style and arrangement. He omits the memoirs altogether, and divides his work into five sections: 1, imperial records; 2, narratives; 3, researches; 4, genealogical registers; 5, appendix. It was printed by orders from the emperor, after the author's death. Another class of histories may be termed annals, giving the consecutive run of events as a whole chronologically arranged. The *Ch'un-ts'ew* of Confucius is undoubtedly the earliest example of this kind; and the next in pretension is the *Chŭh shoo ke nëen*, or "Bamboo Annals," which we are told was found in the tomb of one of the Wei princes, A.D. 284, supposed to have been there for several centuries. The record, which was on slips of bamboo, began with the fabulous reign of Hwang-te, and extended to 299 B.C. It is the general conviction that the original text has been long lost, and that the book now bearing that name is a fabrication. There are some things, however, that favour a belief in its genuineness. (French by Biot, Paris, 1842; English by Legge, Hong Kong, 1865.) The records of several of the dynasties have been written separately in this fashion, but the most celebrated production is the great work of Sze-ma Kwang, entitled *Tsze che t'ung këen*, on which he was engaged for nineteen years, in the latter part of the eleventh century. This, with the various appendices, comprising 326 books, embraces a period from the commencement of the fourth century B.C. down to the end of the five dynasties preceding the Sung. A prefix to this history, entitled *T'ung këen wae ke*, in 10 books, was composed by Lew Shoo, the associate of Sze-ma Kwang; beginning with the myths of the fabulous period of Fŭh-he, it ends at the place where the *T'ung këen* begins. About a century after the time of Sze-ma Kwang, the *T'ung këen kang mŭh*, which is a reconstruction and condensation of the *T'ung këen*, was drawn up under the direction of the celebrated Choo He. The first book only, on the principles of the work, is from the hand of Choo himself, the remainder being compiled by his pupils under his guidance. The whole is compressed into 59 books. An elucidation of this was afterward published by Yin K'e-sin in 59 books. Lew Yew also wrote a treatise on the principles adopted in the composition, in 50 books, on which he was occupied for thirty years. Wang K'ih-k'wan, in the early part of the fourteenth century, wrote an examination of the discrepancies connected

with Choo's work. During the Yuen dynasty, Wang Yew-hëŏ published his researches on the *T'ung këen kang mŭh.* In 1359 Seu Chaou-wăn completed a critical examination of the same. Early in the Ming, Ch'in Tsie published his correction of errors, being the result of a minute investigation of the *Kang-mŭh.* In 1465 Fung Che-shoo published his illustrations of the *Kang-mŭh* drawn from other sources. About the close of the fifteenth century, Hwang Chung-chaou dissected these last mentioned seven works, placing each paragraph under the corresponding part of the *Kang-mŭh,* when the work assumed the form it has retained to the present day, a very valuable compendium of history, the result of a vast amount of erudition. There is a French translation by De Mailla (*Histoire générale de la Chine,* 13 vols., Paris, 1777–'85). During the Sung, Kin Le-tsëang wrote an additional section, carrying the history back to the time of the monarch sage Yaou, and from that down to 431 B.C., where Choo's work commences. A further portion was afterward composed by Ch'in King, extending back to the fabulous era of Fŭh-he. These two last portions were combined into one by Nan Hëen in the Ming dynasty. In accordance with an imperial roscript issued in 1476, a supplement to Choo's history was composed by a committee of fifteen scholars. Near the close of the Ming, these several sections were revised and published as a single work, by Ch'in Jin-seĭh, the national historiographer. It was divided into three parts, known respectively as the introductory, principal, and supplementary sections. Having been again revised and submitted for imperial inspection, it received the imprimatur in 1708, and a new edition was issued in 91 books, under the title *Yu p'e t'ung këen kang mŭh.* The *Fung-chow kang këen tseuen pëen* is an abbreviated history in 32 books, by Wang Fung-chow, and embraces the period from Fŭh-he down to the end of the Ming dynasty. Morrison drew his historical information from this work, when composing his *View of China for Philological Purposes* (Macao, 1817). The *Kang këen e che lŭh,* by Woo Shing-keuen, is an abridgment of the *T'ung këen kang mŭh,* from the commencement of history to the close of the Ming dynasty. A considerable portion of this work, from the time of the monarch Yaou to B.C. 722, has been translated by Medhurst, and printed as an appendix to his *Shoo-king.* In this class of books, every year, besides being headed by the year of the monarch's reign, or some portion of his reign with a special designation, is also marked by two characters of the sexagenary cycle, thus providing a double check against error in the chronology. This cycle is formed

by the combination in pairs of two series of characters, one numbering 10 and the other 12. In the most ancient works the cycle of 60 is never used for the years, but only for the days. In the dynastic histories it is used for both the years and days. In the *Kang-mŭh* it is very sparingly employed for the days.

A third class of histories may be designated "complete records," deviating as they do from the formal divisions of the dynastic histories, and paying little regard to the restraints of mere chronological technicalities. Dealing with every historical event *per se*, they bring all kinds of incident and information to bear on the matter in hand, regardless of contemporary questions which have no immediate bearing upon it. The histories of several of the dynasties have been written on this plan; but one of the principal works of the kind is the *Yŭh she*, a chronicle by Ma Sŭh of the present dynasty, in 160 books. The subjects treated extend from the creation down to 206 B. C. The *T'ung che* is a historical work belonging to still another class, which has been termed "separate histories." The plan is very much the same as that of the dynastic histories, but they are not limited as to the stretch of time they embrace, whether it include a great number of dynasties or merely one. The work just named is a history of the empire from Fŭh-he down to the Tang dynasty. The division of the work is into imperial records, biographies of empresses, registers, compendiums, and narratives. Matters of much interest are found in the compendiums. It was composed in the Sung dynasty by Ch'ing Tseaou, and is in 200 books. The *T'ung tëen* is a work not unlike the preceding in character, though some native writers place it in a different class. It also consists of 200 books, and was composed by Too Yew, a scholar of the Tang. It is divided into eight sections, on political economy, literary graduation, government offices, rites, music, military discipline, geography, and national defences. It extends from the earliest period of history to the middle of the eighth century, and is a work highly esteemed by the Chinese. The *Wăn hëen t'ung k'aou*, by Ma Twan-lin of the Sung, is a work well known to European scholars, from the frequent quotations and extracts made by sinologues. It consists of 348 books, which include a period from the commencement of history to the early part of the thirteenth century, very near the author's time. He has expanded the eight sections of the *T'ung tëen* into nineteen, and added five mor , on bibliography, imperial lineage, appointments, uranography, and phenomena. It has been wrongly named a cyclopædia by Europeans. These three works

are looked upon as a set by the natives, who call them the *San tëen*, or "Three Canons." A supplement to Ma Twan-lin's work was completed by Wang K'e in 1586, consisting of 254 books, bringing it down nearly to the end of the Ming. This continuation was revised by imperial commission, and an order issued in 1767 for the composition of analogous supplements to the *T'ung tëen* and *T'ung che*, which were completed, bringing the whole down to the close of the Ming. A second supplement to all the three was also executed by imperial commission, extending the details to the eighteenth century. These contain a great fund of valuable and interesting matter, but unfortunately the text is very full of typographical errors.

There is a class called "Miscellaneous Histories," as a specimen of which may be mentioned the *Nan keang yĭh she*, a work in 30 books, composed about the end of the last century, under imperial patronage. The subject is the unsuccessful efforts of the last three descendants of the Ming family, Fŭh-wang, Tang-wang, and Yung-ming-wang, to re-establish the falling dynasty. It contains records of the princes and biographies. Many eventful episodes find a place in this class.

Biographies, including autobiographies, personal adventures, and travels, form a very numerous and interesting class, and extend over the whole range of Chinese history from several centuries before the Christian era. The *Kaou sze chuen*, composed about the fourth century, contains the biographies of ninety-six scholars. The *T'ang tsae tsze chuen*, the work of a foreigner from the west during the Yuen dynasty, contains the biographies of 397 authors and authoresses during the T'ang and succeeding five dynasties. The *Mwan chow ming chin chuen* is an imperial work in 48 books, containing biographical memoirs of all the famous Mantchoo ministers up to the middle of the last century. There is a similar record of the Chinese ministers of the present dynasty, entitled *Han ming chin chuen*. The *Koo lëë neu chuen* is a biography of famous women, written by Lew Heang in the first century B. C. There are a great many female biographies published at various times. The *Ta tsze gän sze san tsang fă sze chuen* is a history of the life and travels of the famous Buddhist priest Heuen-chwang, but the book is very rare. (French by Julien, Paris, 1853.) The *Se she ke* is a short but interesting sketch of the progress of the Mongol army under the conqueror Hulagu, through central Asia, as far as Bagdad, from the year 1252 to 1259. The narrative is given by Ch'ang Tĭh, an envoy from the camp to the Tartar court at Karakorum. This has been frequently reprinted, sometimes in a

separate brochure, and sometimes forming part of a collection (French by Rémusat, Paris, 1829; and by Pauthier, 1865.) The *E yih lüh* is an account of an embassy through Siberia and Russia to the Tartar settlements on the Volga. (English by Staunton, London, 1821.) The *Tsing hae fun ke* is a narrative of the adventures of a notorious pirate fleet in the China seas. (English by Slade, in the *Canton Register*, 1829; and by Neumann, London, 1831.) The *Ch'ow jin chuen*, a biography of philosophers in 46 books, appeared in 1799, from the pen of the well-known scholar Yuen Yuen, formerly governor of Canton. Recently a supplement of six books has been added. Besides memoirs of all the celebrated men of science in China, the last three books form an appendix, treating altogether of foreign astronomers and mathematicians; among whom are found Meton, Aristarchus, Euclid, Clavius, Newton, and Cassini; and the Jesuit missionaries Ricci, Ursis, Aleni, Longobardi, Diaz, Terence, Rho, Schall, Verbiest, Stumpf, Smogolenski, Kögler, Pereyra, &c. There are also a number of Buddhist biographies, some giving an account of the Indian founders and luminaries of the faith, as the *Che yuĕ lüh*; and others recording the lives of those who have attained distinction in China in the same body, as the *Kaou sāng chuen*, and the supplement to the same. When it is remembered also that more than half of the dynastic histories are occupied with personal memoirs, it may be imagined how much reading of this kind is included in the national literature.

"Historical Excerpts" also form a distinct class, and although it includes some tolerably voluminous works, they are not so numerous as most of the other classes. As an example may be noticed the *She wei*, in 330 books, published early in the present dynasty, consisting of choice extracts from the national history. As the term *king* was above explained to mean originally the warp of cloth, and metaphorically classic literature, so here the word *wei*, which is the counterpart of *king*, means originally the woof, and in its metaphorical sense implies the equal necessity of this to complete the great web of history.

"Contemporary Records" as a class include the histories of various states holding an independent status beside the central government of China. Such is the *Shih lüh kwŏ ch'un ts'ew*, a history of sixteen dynasties that existed contemporaneously with the Tsin and Sung. The names of these states are the Former Chow, After Chow, Former Yen, Former Tsin, After Yen, After Tsin, Southern Yen, Hea, Former Leang, Shuh, After Leang, Western Tsin, Southern Leang, Western

Leang, Northern Leang, and Northern Yen. The original work of this name, in 102 books, written about the fifth or sixth century, is lost; and the present work, composed during the Ming, is one of the most ingenious literary frauds on record. The *Gan nan che lëŏ*, in 19 books, is an account of Anam, by a native of that country who sought refuge in China after having surrendered a city to the Mongol troops in the reign of Kublai Khan. A small class consists of "Chronicles of the Seasons," such as the *Suy she kwang ke*, a work of the Sung, detailing the natural indications of the months throughout the year, with the particular duties attaching to each.

Geography is a very voluminous class, if we include topographical works in the designation. The *Shan hae king*, or "Classic of Hills and Seas," is a small work full of monstrosities, and only claims notice on account of its great antiquity, as it is thought by some competent critics to be at least as old as the Chow dynasty. The *Ta ts'ing yĭh t'ung che*, in 500 books, is a carefully compiled geography of the empire, comprising an amazing amount of statistical information. The general plan of the work is to describe in succession the several provinces of the empire, noting the astrological division, limits, configuration of the country, officers, population, taxes, and renowned statesmen belonging to each. Under each prefecture and department there is a more detailed description of the various districts, descending to additional particulars regarding the cities, educational institutes, hills and rivers, antiquities, passes, bridges, defences, famous tombs, temples, men of note, travellers, remarkable women, religious devotees, and productions of the soil. A considerable section at the end is devoted to a description of the extra-frontier dependencies and foreign nations. This in itself is a huge work, but it sinks into insignificance when compared with the mass of topographical writings, which number thousands of volumes. For each of the eighteen provinces there is a *T'ung che*, or "Provincial Topography," which may be considered a greatly amplified development of the headings in the last named work. As an example take the *Chĕ keang t'ung che*, or "Topography of Che-kiang Province," in 72 books, which although scarcely above half the size of some of them, is considered a very favourable specimen as to the general plan and execution. In this province there are eleven *foo* or prefectures, each of which has its *foo che*, or prefectural topography. Take as one of these the *Ning-po foo che*, or "Topography of Ningpo Prefecture," the first edition of which appeared in 1730, in 36 books. In this prefecture are six *heën*, or districts, to each of which there is

a *heën che*, or district topography; as for instance the *Yin heën che*, or "Topography of Yin District," in 30 books. These are by no means the most voluminous of the series, and when it is remembered that there are 267 prefectures and 1,473 districts in the empire, and that each of these with rare exceptions has its record, some idea of this mass of detailed minutiæ may be formed. But even this does not include the whole; for there is a very extensive series also of similar accounts of famous hills, lakes, rivers, and places of note, such as the Bohea hills, Pootoo island, Silver island, the Western lake at Hangchow, and others far too numerous to refer to. There are many accounts of neighbouring countries also; as the *Ch'aou seën che*, a description of Corea written by a native of that country. The *Chin lŭ fung t'oo ke* is a description of Cambodia, written by a member of a Chinese embassy to that country in 1295–'7, and is now the only authentic account in any language of the state of that country in the ancient days of its prosperity. (French by Rémusat, with a map, in *Nouvelles annales des voyages*, vol. iii; without the map, in *Nouveaux mélanges asiatiques*, 1829.) The *Wei tsang t'oo shĭh* is an account of Thibet. (French by Klaproth, Paris, 1831.) The *Hae taou yĭh che* is an account of Java and the Malayan archipelago. (English by Medhurst, *The Chinaman Abroad*, Shanghai, 1849.) The *Se tsang ke* is a record of the country and customs of Thibet, with an itinerary at the end. There are a number of interesting accounts of central Asia by Chinese Buddhist travellers in different ages. The *Fŭh kwŏ ke* contains an account of the travels of the priest Fă-hëen through Turkistan and India in the fifth century, where he went to investigate the state of Buddhism. (French by Remusat, Paris, 1836; new ed., with illustrations, in Charton's collection, 1862.) In the *Lŏ yang kea lan ke*, a description of the temples in Lo-yang, the metropolis of the Northern Wei dynasty, is a similar account of a mission of Buddhist priests in the sixth century. (German by Neumann, Berlin, 1833.) The *Ta t'ang se yĭh ke* is an account of 138 kingdoms of central Asia, translated chiefly from the Sanskrit, by Heuen-chwang, a Chinese priest who had travelled through most of these countries, during an absence of sixteen years from his native land. (French by Julien, 2 vols., Paris, 1857.) The geography of Commissioner Lin, *Hae kwŏ t'oo che*, in 50 books, is a description of the world, first issued in 1844. The latest edition is enlarged to 100 books. A later production, the *Ying hwan che lëŏ*, by Seu Ke-yu, formerly governor of Fo-kien, and now (1873) holding a high official post in the capital, though less bulky,

is on the whole a much better account of the nations of the world. The maps, though very sparsely filled with names, are correct in the general outlines. The *Kwang yu ke*, a geography of the empire in 24 books, written about the commencement of the seventeenth century, is very useful as giving the ancient names of places at different periods.

A small number of books have been classed together as "Official Repertories," treating of the numbers and duties of various classes of officers of the empire, such as the *Leih tae chĭh kwan peaou*, in 63 books, which consists of a series of tables of the officers of the several departments of government, and the changes that have taken place in the names and duties of the respective offices, from the earliest times to the present dynasty.

"Works on the Constitution" comprise some very formidable productions; as the most voluminous of which may be named the *Ta ts'ing hwuy tëen*, in 80 books, giving a development of the general principles of the government under the present dynasty. There is an accompanying section of illustrative plates in 132 books; and a very imposing supplementary section in 920 books, consisting of a historical detail of the changes that have taken place in the several departments of the government since the commencement of the dynasty. Separate works also exist on the governmental regulations of each of the six supreme boards, and also of several of the subsidiary ones. A code of laws of the empire is published in 47 books, with the title *Ta ts'ing leŭh le*, a book remarkable for the clearness of its phraseology, the reasonableness of its stipulations, and the general consistency of its ordinances throughout. (English by Staunton, London, 1810; French by Sainte-Croix, Paris, 1812.)

"Catalogues," under which head are included books on inscriptions, are also tolerably numerous. The catalogue of the *Sze koo tseuen shoo* library, with the historical and critical information appended to each title, forms one of the finest specimens of bibliography possessed by any nation. The *Wăn yuen kŏ shoo mŭh* is a catalogue of the imperial library of the Ming dynasty. It was republished in 1800 in 20 books, a bare list of titles. The *Wŭh gan leĭh swan shoo mŭh* is a catalogue of the mathematical and astronomical works written by Mei Wŭh-gan, compiled by himself, containing much curious information on the state of the science in China. The *Kin shoo mŭh lŭh* is an *index expurgatorius*, in two parts, the first containing works of which parts only are objectionable and forbidden; the second consists of books that are condemned *in toto*. There are several ten thousands

of volumes in all, chiefly written about the close of the last dynasty, and nearly all of a political tendency. Other lists are in circulation, comprising a long array of novels and light reading, forbidden in consequence of their licentious tendency. The most complete work on inscriptions is the *Kin shih tsuy peën*, in 160 books, a comprehensive collection from nearly 2,000 before Christ to the beginning of the thirteenth century of our era. The texts are given *in extenso*, and much critical addenda.

Although native scholars altogether exclude novels from a place in their literature, yet they are in fact a very important and influential class of reading, forming as they do the views and opinions of the large mass of the people on the history of their own country, being almost the only source from which they gather any ideas on the subject at all. They are not so numerous, however, as might be expected under the circumstances; nor do they to their readers lose any of their freshness with age. They are more or less colloquial in language, and are studied by foreigners as exercises in the Mandarin dialect. From one and another a tolerably connected view of history may be obtained. In the *Fung shin yen e* we have the adventures of Woo-wang, son of the founder of the Chow dynasty, about the twelfth century B.C. The *Lëě kwŏ che* embraces the last five or six centuries of the same dynasty. The *Se han yen e* covers the first two centuries B.C., being the story of the Western Han popularized; and the *Tung han yen e*, which is a corresponding tale of the Eastern Han, includes the first two centuries of our era. The universally read and most popular story of the *San-kwŏ che yen e* turns altogether on the troubles that followed on the overthrow of the Eastern Han, when the country was divided into three states, embracing the period from 168 to 265. (French translation of the first 44 chapters, by Pavie, 2 vols., Paris, 1845.) The *Nan pih chaou yen e* describes the succeeding period, when the empire was divided between the northern and southern dynasties. The *Suy t'ang yen e* is a popular record of the Suy and Tang dynasties. The *Tseen t'ang* relates the downfall of the Tang dynasty. The *T'ang woo tae chuen* gives the latter part of the Tang with the succeeding five dynasties. The *Shwuy hoo chuen* is a tale of brigandage about the close of the eleventh century; and the *Shwŏ yŏ tseuen chuen* is founded on the history of Yŏ Fei, a famous general of the twelfth century. The *Se yew ke* is a mythical account of the adventures of Heuen-chwang, the Buddhist priest who went to India in search of Buddhist books in the seventh century. The *Kin ping*

mei is a picture of the dissolute manners of the age at the beginning of the twelfth century. As a literary work it stands high, but is condemned for its immoral character. The *Se yang ke* is an apocryphal history of the expedition of the eunuch Ching Ho to subdue the refractory nations of the southern ocean, at the commencement of the fifteenth century. The *Ching tĭh hwang yew keang nan chuen* recounts the adventures of the emperor in a supposed incognito journey through Kiang-nan province in the sixteenth century. (English by Tsin-shen, Malacca, 1846.) Life in the metropolis during the present dynasty is depicted in the *Hung low mung*, written in a very colloquial dialect. The *Haou kew chuen* ("The two Fair Cousins") is a tale of social life. (English by Percy, London, 1761; French, Lyons, 1766; German by Marr, Leipsic, 1766.) The *Yŭh keaou le* is also a picture of domestic manners. (French by Rémusat,. Paris, 1826; by Julien, 1864; English, London, 1827.) The *Ping shan lang yen* is more admired for the language than the plot. (French by Julien, *Les deux jeunes filles lettrées*, Paris, 1860.) The *Leaou chae che e* is a popular book of fairy tales, or rather stories of elfin foxes and such like, by P'oo Sung-ling, and published by his grandson in 1740. There are in all 300 of these legends, collected by the author chiefly from the mouths of the people, among whom there is a strong belief in the possession of foxes by these ethereal sprites. The *Kin koo ke kwan* is a small collection, as the name implies, of marvellous tales of fiction relating to ancient and modern times The *Lung t'oo kung yan* is a series of *causes célèbres* in the Chinese courts of justice, giving a curious insight into some of the more tortuous cases of jurisprudence among them.

In contrast with the preceding, there is a class of authors termed orthodox writers, who are deemed the special upholders of the doctrine of Confucius, and whose works are assumed to be the proper objects of study for all who aspire to eminence in the government or the school of the literati. Every age has had its men of mark in this school, and, comparing the writings of various authors, we find considerable latitude of views among them. Before the Christian era we have such names as Seun Hwang, the opponent of the views of Mencius regarding the original rectitude of human nature, whose writings are known by the title *Seun tsze*; Kea E, the author of the *Sin shoo*; Lew Heang, author of the *Sin seu* and *Shwŏ yuen*; and Yang Heung, author of the *Fă yen* and other works. It would be easy to go on from age to age, quoting such scholars as Han Wăn-kung, Lin Shin-sze, and a host of others; but the period that calls

for special notice is the eleventh century, which forms an epoch in the history of the orthodox school. The philosophic views first propounded by Chow Leen-ke were followed up by Chang Ming-taou and the two brothers Ch'ing Haou and Ch'ing E. The renowned philosopher of China, Choo He, was the pupil of Ch'ing Haou, and by his writings gave a lustre to that school of teaching, that has been able to bear down all opposition. These men thought out for themselves a system of the universe, and formed a theory according to which all nature was developed by a process of evolution from a primal monad, or even something beyond that. The writings of Choo on natural and ethical philosophy have had a wonderful influence over the native mind. In 1713 the emperor ordered a collection to be made of the principal of Choo's philosophical works, which were published under his immediate supervision, with the title *Choo tsze tseuen shoo*. One of his most widely popular productions is a small work for the instruction of youth, entitled *Seaou hëŏ*.' (Latin by Noel, Prague, 1711; French by Pluquet, Paris, 1784; the first two out of six books in English by Bridgman, in the *Chinese Repository*, Canton, 1837–'8.) It was one of Choo's pupils, Ch'in Chun, who first introduced the term *Sing le* as the designation for mental philosophy, and a number of works have been since written on that science. The third emperor of the Ming had a collection made of all the principal writings on this subject, embracing the productions of 120 scholars, which was published in 1415, with the title *Sing le ta tseuen shoo*, in 70 books. This was revised by an imperial commission in the last century, and compressed into 12 books, with the title *Sing le tsing e*. Several of the monarchs of the present dynasty, as preceptors of the people, have written hortative and didactic works, enforcing Confucian ethics. In 1655 a treatise of this kind, under the title *King sin lŭh*, was issued by the first emperor. It is divided into seven parts, and directed against heart vices. The *Shing yu kwang heun*, or "Homilies on the Sacred Edict," consists of sixteen maxims by Shing-tsoo, the second emperor of the present dynasty. A short homily was added to each of these by the succeeding emperor in 1724, and orders were issued to have one of these read and explained to the people of every district, on the 1st and 15th of each month. (English by Milne, London, 1817.) Several elementary school books may be mentioned as belonging to this class, small in size, but widely known and read. The *San tsze king* or "Trimetrical Classic," is a tract written in columns of three characters each, the subject matter including the elements of history, morals, and relative duties. Of

this and the next there are several translations in English, French, and German. The *Tseën tsze wăn*, or "Thousand-Character Classic," is a small work consisting of 1,000 different characters, said to have been thrown together promiscuously, from which the author formed this rhyme, in lines of four characters each, in a single night. (Latin by Hoffmann, Leyden, 1840.) These two tracts form the preliminary studies of the schoolroom, and are memorized by the scholars. Another little book which is in very common use is the *Yew hĕŏ she*, or "Odes for Children." (English by Bridgman, in the *Chinese Repository*, Canton, 1836.) The *Pih kea sing* is a mere catalogue of 454 of the family names of China, and is one of the elementary school books.

Works on agriculture form an important though not a very numerous class. Under this head native writers include the art of grazing, breeding cattle, rearing silkworms, and a variety of collateral branches of industrial science. A famous work of this kind is the *Nung ching tseuen shoo*, a cyclopædia of agriculture, as it has been termed, in 60 books. It is the production of Seu Kwang-ke, an early disciple of the Jesuits in the seventeenth century, better known to Europeans by the name of Paul Seu. After a series of pertinent quotations from the classics, he treats of the division of land, processes of husbandry, hydraulics, including European methods, agricultural implements, rearing silkworms, planting trees, breeding stock, manufacture of food, and provision against dearth. A still more comprehensive work was compiled by imperial order in 1742, with the title *Show she t'ung k'aou.*

Medical treatises are exceedingly numerous and various in their subjects. Medical practice in China, it is true, stands very low in comparison with European science; yet, considering the attention that has been given to the subject for 2,000 years, it is scarcely reasonable to condemn *in toto* their medical literature till we know something more about it. The medical art is divided by them into nine branches, relating respectively to the main arteries and blood vessels, their ramifications, fevers, female complaints, cutaneous complaints, cases of acupuncture, eye complaints, throat, mouth, and teeth complaints, and bone diseases. Each of these departments has its literature, while there are also very many works of a general character. The *Tung e paou keen*, a large work of Corean origin, embraces the whole compass of medicine, and has been several times republished in China. Books of prescriptions are very numerous. Materia medica has also received a considerable share of attention.

as may be seen by the large work of Le She-chin, the *Pun ts'aou kang mŭh.* in 52 books, on which the author was engaged for thirty years, having made extracts from upward of 800 preceding authors. It is in fact a kind of natural history, embracing the three kingdoms of nature, the subjects being arranged under the several divisions of water, fire, earth, minerals, herbs, grain, vegetables, fruit trees, garments, and utensils; insects, fishes, crustacea, birds, beasts, and man. It was written toward the end of the Ming, and several editions have been published during the present dynasty. The nucleus of the work is traditionally ascribed to the half-mythical Shin-nung.

Works on astronomy and mathematics, though tolerably numerous, have a somewhat limited circle of readers, yet these are among the *élite* of Chinese intellects. The oldest work on this subject is the *Chow pe swan king*, a tract on the elements of trigonometrical observation and the rudiments of astronomy. It is thought to be a relic of the Chow dynasty. (French by Biot, Paris, 1842.) The *Sin e seang fă yaou* was written by Soo Sung at the close of the eleventh century. The author had constructed a large celestial globe, with machinery to represent the mechanism of the heavens and illustrate the seasons, the whole set in motion by water power. The work named was written specially to explain the theory of these movements. The *Kĭh seang sin shoo*, by Chaou Yew-k'in, appeared during the Yuen dynasty, and differed in several particulars from the orthodox views of the time. It ascribes the length of the day, not to the distance of the sun, but its altitude, and the heat of the atmosphere to the accumulation of air. The planets are made to circulate round the earth in parallels of declination, while they revolve round the pole of the ecliptic in tortuous paths. It ascribes the apparent increase in the size of the sun near the horizon to its nearer approach to the earth than when in the zenith. In other matters also it deviates from the received doctrines. On the arrival of the Jesuit astronomers in the seventeenth century, a great revolution took place in the native theories; the result of which was the compilation of the *Sin fă swan shoo*, in 100 books, about the year 1634, by an imperial commission consisting of natives and Europeans. It is divided into 11 parts, treating respectively of the elements of the system, standard numbers, calculations, instruments, general operations, sun's course, fixed stars, moon's path, nodes and conjunctions of sun and moon, five planets, and nodes and conjunctions of the five planets. The Ptolemaic

theory is still adhered to, but Tycho Brahe's discovery of the variation in the obliquity of the ecliptic is stated, and his numbers adopted for that and other elements, as also his solar and lunar tables. The European astronomers were received even more favourably on the establishment of the present dynasty than they had been during the Ming, and their influence is apparent in the great thesaurus entitled *Leüh leĭh yuen yuen*, compiled under the direct superintendence of the emperor in the first half of the eighteenth century. This is composed of three parts; the first, entitled *Leĭh seang k'aou ching*, on astronomy, has several points of divarication from the great work of the Ming. The obliquity of the ecliptic is given from native observation as 23° 29′ 30″, being two minutes less than Tycho Brahe's statement. In the correction for the sun's velocity, the new work takes account of the minute motion of the perihelion, and the epoch is changed from 1628 to 1683, but the Ptolemaic theory is still retained. In a supplementary portion, however, the elliptic orbits of the planets are suggested, and Kepler's law of equal areas in equal times is stated. The sun's parallax is given as ten seconds, instead of three minutes, the old number. The circulation of Mercury, Venus, and Mars about the sun is also named, but the whole are still made to revolve about the earth as a centre. The second part of the great work, entitled *Soo le tsing yun*, is on pure mathematics, treating of the theory and use of numbers, geometry, and mensuration, with a description of the European system of algebra, and tables of the numbers of trigonometry and logarithms. The third part, entitled *Leüh leu ching e*, is on music, including a description of the European system, by Thomas Pereyra. The *Tsĭh yuen hae king* is a work on trigonometry by Le Yay, finished in 1248. This is remarkable as being the earliest book containing the *Tëen yuen*, a native system of algebra, about which a great deal has been written during the present dynasty.

Although nearly all the dynastic histories have a portion specially allotted to divination, there are few separate works on the subject extant earlier than the Tang dynasty. From that time on there has been no lack of a constant supply, every age having added to the accumulating mass. Under this head are included works on astrology, geomancy, divining by the tortoise, by straws, by diagrams, and in a variety of other ways. The *Hëë ke peën fang shoo* is the authorized guide to astrology, published under imperial patronage in 1741. The astrological portion of the almanac is composed according to the principles laid down in this treatise.

Cyclopædias as a class embrace a variety of bulky works, combining to some extent the characteristics of our cyclopædia and concordance. So early as the second or third century we find it was the custom to make digests of the national literature for the emperor's inspection, and thus originated the class under consideration. Methodically arranged according to subjects, under each heading extracts from former works on the topic are given. Some of the more important of these thesauri were compiled by imperial commission during the Sung dynasty, as the *Sze luy foo*, in 30 books, composed in anomalous verse with a running commentary by the author, Woo Shŭh: the *T'ae ping yu lan*, in 1,000 books; and the *Ts'ĭh foo yuen kwei*, also in 1,000 books. The *Yŭh hae*, in 200 books, was also published under imperial patronage in the twelfth century. Even these voluminous collections, however, are but pigmies compared with the work that was carried through by the second emperor of the Ming dynasty. With a printed library of 300,000 books, and more than double that number in manuscript, he conceived the idea of resolving the whole into a monster cyclopædia. A commission was appointed to dissect the whole of the existing volumes, classical, historical, philosophical, and literary, embracing astronomy, geography, the occult sciences, medicine, Buddhism, Taouism, and the arts. Three presidents of commission were appointed, under whom were five chief directors and twenty sub-directors, besides 2,169 subordinates. The work was completed about the end of 1407, numbering in all 22,877 books, besides 60 books of contents, and was entitled *Yung lŏ ta teën*. A copy was made from the original draught, but the government was deterred from printing by the great outlay that would be necessary. Two other copies were made in the sixteenth century, but during the troubles that ensued at the close of the Ming, or previously, the original draught and two of the copies were consumed by fire. On the restoration of peace only one of the copies was to be found, and that was deficient 2,422 books. By this manuscript collection 385 ancient and rare works have been preserved, which otherwise would have been irrecoverably lost. Many of these have been since reprinted.

Under the term "Minor Authors" are included a host of works, chiefly miscellaneous narrations, records of marvels, traditions, and anecdotes. A good specimen of the class is the *Yew-yang tsă tsoo*, in 20 books, written in the eighth century. It treats largely of the strange and the supernatural, but it is useful in the investigation of

many archæological questions. The *Chuĕ kăng lŭh*, in 30 books, was written at the close of the Yuen dynasty, and contains a number of notices regarding the downfall of the Mongol empire. There is a good deal of miscellaneous information about the affairs of that dynasty, and some few notices relating to countries in the west. The books of the Buddhists alone would form a tolerably extensive library. The translation of Sanskrit works into Chinese was commenced in the first century, and continued almost without interruption till the ninth, during which period they added from 2,000 to 3,000 works to the literature of China; and some of these translations are now the only examples of the works to be found in any language, the originals being lost. By far the greater portion of these belong to the three classes, *King*, "Classic," *Leŭh*, "Discipline," and *Lun*, "Metaphysics"; corresponding to the Sanskrit *Sutra*, *Vinaya*, and *Shastra*, including the *Dhârani*, or "Charms." The remaining are chiefly biographical and descriptive, including the *Avadanas* and *Agamas*. The *Lalita vistara*, a life of Buddha, has been four times translated into Chinese, with as many different titles, about the years A.D. 70, 308, 652, and one subsequent. An abstract has also been published under the title *Ching taou ke*. Besides the translations, there is a considerable body of native Buddhist literature, among which may be mentioned the *Fa yuen choo lin*, in 120 books, completed in 668, a comprehensive cyclopædia of the Buddhist religion, detailed in 100 sections.

Among the writings of the Taouists, the *Taou tĭh king* of Laou Keun, the reputed founder of the sect, will ever stand pre-eminent. Written in classic diction, and embodying as it does some profound speculations, it has attained an exceptional reputation, and even the fastidious literati think it no shame to study the treatise of the old philosopher. (French by Julien, Paris, 1842; English by Chalmers, London, 1868; German by Plänckner and by Strauss, both Leipsic, 1870.) *Leĭh tsze* and *Chwang tsze* are two works of the same school, named after their respective authors, who wrote several centuries before the Christian era; and the very age of their productions has insured them a certain degree of deference as ancient writers. Later down in the stream of time we find a great deterioration in Taouism. Gradually its professors gave themselves up to the study of alchemy, the search after the philosopher's stone, the use of charms and amulets; rituals were introduced and images set up in the temples. Thus we have the *Ts'an t'ung k'e*, a treatise on alchemy written in the second century; and the well-known work of Kŏ Hung in the fourth century,

under the title *Paou p'o tsze*, is a treatise chiefly on the immortals, alchemy, charms, exorcism, &c., with a section on government and politics. Leu Tung-pin, who flourished during the Tang dynasty, one of the reputed eight immortals, is also a name recognized in the world of letters. His original compositions are published under the title *Leu chin jin wăn tseih*, literary and poetical, coloured by Taouist views. The *T'ae shang kan ying pëen*, or "Book of Rewards and Penalties," professing to be the work of the founder, appears really to be a production of the Sung, but the author is not known. The object of the book is to elucidate the doctrine of future retribution, and it has attained a greater popularity than any other Taouist production. (French by Rémusat, Klaproth, and Julien, 1816, 1828, and 1830; English in the *Canton Register*, 1830.)

In poetry and polite literature, the writings of the Chinese are very voluminous. Their poems are most frequently descriptive of nature and natural scenery, domestic life, or the cares of the world. Martial odes are not infrequent. Epic poetry is almost unknown in China; but we find occasional details of historical events. Somewhat singularly, the *Tsoo sze* or "Elegies of Tsoo," form a class by themselves. These are a series of plaintive poems mainly written by K'eŭh Yuen, a minister of the kingdom of Tsoo and relative of the prince. Distinguished by probity of character, he was the victim of slander by his envious colleagues, and ended his existence by throwing himself into a river. His fate is still commemorated in the dragon boat festival. His principal piece, *Le saou*, is a justification of his public character. (German by Pfizmaier, Vienna, 1852; French by Saint-Denys, Paris, 1870.) A good many commentaries have been written on the collection. One of the best editions of the leading piece is the *Le saou kaou*, published in 1741, by Koo Ching-t'eën, with an original exposition.

Another class is termed "Individual Collections," containing the original productions of single authors. Writings of the kind made their appearance at an early period in the Christian era, consisting generally of post-mortem compilations. In the sixth century these began to be divided into several sections according to time or subject. This has been a most prolific class, but one in which comparatively few authors find a place in the ranks of fame. In the bibliographical catalogues of the Sung dynasty there are not found a tenth part of the names of authors in this class contained in those of the Suy and Tang dynasties; and the catalogues of the present day scarcely contain

a tenth part of the titles of those recorded as extant during the Sung. Among the most famous is found *Le t'ae pĭh tsĕĭh*, the productions of Le Tae-pih, the renowned poet of the Tang dynasty; also *Tung p'o tseuen tseĭh*, in 115 books, from the pen of the scarcely less celebrated Soo Tung-po, the Sung poet. Both these have been frequently republished with commentaries. The writings of Lŭh Kew-yuen, a contemporary and friend of the renowned Choo He, were arranged by his son, and edited by his pupil Yuen Sĕĕ in the thirteenth century, with the title *Seang shan tseĭh*, in 28 books. This holds a prominent place among the elegant writers of the Sung dynasty, and consists of letters, memorials to the throne, records, prefaces and dedications, miscellaneous pieces, poems, sacrificial documents, epitaphs, and sepulchral inscriptions. The emperors of the present dynasty have distinguished themselves in this class more than in any other; and we have a bulky series from the different monarchs. Thus there is a literary collection of 176 books, besides another of poems in 28 books, by the second emperor of the line. His successor has left a collection in 30 books, and the fourth monarch has left collections to the amount of 166 books. Single poems should also come within this category, such as the *Hwa tseen ke*, a love tale written in metrical stanzas. (English by Thoms, *Chinese Courtship*, London, 1824.)

In the sixth century a new class of works appeared, which may be termed anthologies. The first of these was compiled about 530, by the son of the founder of the Leang dynasty. It is named *Wăn seuen*, and is still one of the best known, the contents being selections from all preceding writers of fame. The subjects into which it is divided are anomalous verse, poems, elegies, sevens verse, decrees, appointments, orders, instructions, essays, manifestations, statements, declarations, accusations, documents, memorials, epistles, notifications, replies, rejoinders, farewells, prefaces, eulogiums, commendations, contracts, historical relations, commendatory historical narrations, discourses, literary gems, admonitions, monumental legends, obituaries, laments, inscriptions, epitaphs, memoirs, dirges, and sacrificial orations. A notable work of this kind, with the title *Koo wăn yuen keen*, in 64 books, was published by imperial commission in 1685. It gives an uninterrupted succession of choice literary selections, from the time of the *Tso chuen* down to the end of the Sung dynasty. The annotations of five eminent scholars are appended. A huge compilation of the poetry of the Tang dynasty, under the title *Tseuen t'ang she*, in 900 books, was issued in 1703, by imperial commission.

Upward of 2,200 people were employed in making the collection, which they gathered from private histories, miscellaneous works, monumental records, and every available source, making altogether 48,900 pieces. The writings of Le T'ae-pih and T'oo Foo hold a prominent place in the collection. In the fourth or fifth century, when poetry and composition began to be more under the restraints of fixed and conventional laws, critiques on poetry and literature first made an appearance: and to this class we are indebted for a fund of information on the history changes, internal mechanism, and chief aim of this much cultivated branch of art. As an example of these works may be noticed the *She hëo yuen ke hwŏ fă ta ching*, in eighteen books, by Yu Seang, issued in 1697. The various objects of the themes of poetry are detailed in the order of a cyclopædia. The theme is first explained, then its various applications, followed by quotations from the poets, the ideas embodied, and the application in the successive parts of a poem. This is followed by a kind of rhyming dictionary, in which a number of quotations are given under each rhyme, and notes for the artistic management of the same.

In the last class are placed the "Rhymes and Songs." The *tsze*, or rhyme, is a composition between prose and poetry, in which the rhyme is repeated at the end of lines of indeterminate length, unfettered by the laws of versification. It first began to be used in the Tang dynasty, but is much more common in recent times, being generally applied to light and trivial subjects. A large work of this class is the *Yu ting leĭh tae she yu*, in 100 books, published by imperial commission in 1707. This is a comprehensive collection of the choicest rhymes, from the commencement of the art in the Tang dynasty down to the end of the Ming, comprising 1,540 articles, making upward of 9,000 verses. A list of rhymers is included. The *k'eŭh*, or songs, embrace dramatic compositions, these being in great part choral effusions. These are barely acknowledged by literary men as forming a part of the literature of the nation, although they are to be found in every book store. A much valued work of the kind is the *Yuen jin pĭh chung k'eŭh*, or "Hundred Plays of the Yuen Dynasty," being a selection from the productions of more than 200 dramatists who wrote about that period. As a dramatic composition the *Se seang ke*, or "Record of the Western Pavilion," holds the highest place in native estimation; and next to it ranks the *Pe-pa-ke*, or "Tale of a Guitar." A well-known collection of recent date is entitled the *Chuy pĭh k'eu*, numbering several tens of dramatic pieces.

It has long been the custom in China to publish large collections of separate works, under the name of *Ts'ung shoo*, sometimes confined to specialities, but very often ranging over the whole field of literature, and containing some choice or rare treatises in each department, according to the compiler's taste or fancy. These may consist of few or many volumes, some collections extending to hundreds. By this means many works are preserved, which would otherwise probably be lost sight of altogether. As an example of these, the *Han wei ts'ung shoo* is a collection of 96 works written during the Han and Wei dynasties, and republished in the Ming dynasty by Ch'ing Yung in the above form.

IV. Printing.

There is reason to believe that printing by wooden blocks was known to the Chinese in the sixth century, though we scarcely hear anything of its application for four centuries later, till the advantages of the art became so manifest that we are told that in 932 Fung Taou and Le Yu, two ministers of the Later Han, memorialized the throne to have the "Nine Classics" revised and printed. The monarch complied, and in about twenty years the copies were in circulation. From that time, so rapidly did this stereotypography advance, that by the end of the thirteenth century the greater part of the manuscript literature of former ages was already in print. Some few specimens of the Sung dynasty typography are still to be found in libraries, but they are very rare. The mounted manuscript rolls seem to have been immediately succeeded by long strips, printed on one side, and doubled up in a succession of folds to a book size. This practice is still continued for the sacred books of the Buddhists. The next step in advance was the folded sheets stitched together in volumes, as is the practice at the present day. In the eleventh century a scheme for printing by movable clay type was invented by a mechanic named Peïh Shing; we have a minute detail of the process, but there is no account of its having been brought into use; and it is not till the seventeenth century that we hear of movable type being actually employed in printing. A fount of copper types was then made in the imperial printing office, and the *Koo kin t'oo shoo tseih ching*, a gigantic collection of books in 6,000 volumes, was printed with them. The types, however, having fallen out of use, a large proportion of them were purloined by untrustworthy officials, and the remainder melted up to conceal the

fraud. In the following century a set of wooden types was made in the same establishment, for the purpose of printing another collection, the *Sze koo tseuen shoo*, noticed above, the printed catalogue of which contains about 3,440 separate works, comprising upward of 78,000 books or sections. The use of these types, however, has been very limited. At present the *Peking Gazette*, the daily official organ of the government, is printed with movable wooden type; but both the type and the manipulation are of the clumsiest order, and the impression is one of the rudest specimens of typography that can be found. The printing press has not yet been introduced there. Some private firms have used movable copper types for printing for nearly a century past, and in 1850 we are told of a bookseller in Canton who had cast 150,000 tin types from clay matrices. The specimen of them given in the *Chinese Repository* is very creditable to the artist. About forty years ago the Rev. Samuel Dyer, of the London Missionary Society, initiated the use of movable type for China according to the European method. The same work was carried on to perfection by Mr. Cole, and subsequently by Mr. Gamble of the American Presbyterian Mission; and so great has been the success of the latter, that not only are his types used by several European firms, but a considerable number of Chinese have also commenced printing with movable types after the western fashion. Some of the natives have also commenced type founding, and even the making of electrotypes. Books are thus being printed and newspapers put into circulation, and it is difficult to foretell what may be the result of this new impetus.

V. Sinology.

The study of the Chinese language and literature in Europe is almost entirely a growth of the present century, previous to which very few besides the Roman Catholic missionaries had any knowledge of the subject. The first grammar we hear of was printed at Canton in 1703, in the Mandarin dialect, with the title *Arte de la lengua mandarina*, by Father Francis Varo. Bayer published his *Museum Sinicum* in 2 vols. at St. Petersburg in 1730. This contains a short Mandarin grammar, and another of the dialect of Chinchow in Fokien; also a Chinese vocabulary. Fourmont in France was engaged on kindred studies, and in 1742 published his *Linguæ Sinarum Mandarinicæ Hieroglyphicæ Grammatica duplex*, which proves to be a slightly modified translation of Varo's grammar. Five years later he

published his dissertation on the written language, *Meditationes Sinicæ*, a work full of errors. Little else of a philological character appeared in the last century, and any slight interest that might have been created seemed to be on the decline, when Rémusat was appointed professor of the Chinese language in Paris in 1815. The lectures and writings of this distinguished sinologue began to draw the attention of Europeans to China as a great fact, and to invest the literature of the nation with a new interest. His successor, M. Julien, has fully sustained the reputation of the chair. The following are the principal works of a philological character that have appeared:—DICTIONARIES. 1. *In Latin.* *Dictionnaire françois et latin*, composed by Father Basil de Glemona and edited by De Guignes (Paris, 1813). The first part of a supplement to this, by Klaproth, was issued in 1819, containing scarcely a quarter of the whole, but no more was published. De Guignes's was republished at Hong Kong in 1853, without the French, as *Dictionarium Sinico-Latinum.* Gonçalvez, *Vocabularium Latino-Sinicum* (Macao, 1836), *Lexicon Manuale Latino-Sinicum* (1839), and *Lexicon Magnum Latino-Sinicum* (1841). Callery, *Systema Phonetico-scripturæ Sinicæ* (Macao, 1841), arranged on a peculiar phonetic system of his own device. Perny, *Vocabularium Latino-Sinicum* (China, 1861) 2. *Portuguese.* Gonçalvez, *Diccionario Portuguez-China* (Macao, 1831), and *Diccionario China-Portuguez* (1833). 3. *French.* Perny, *Dictionnaire français-latin-chinois de la langue mandarine parlée* (Paris, 1869), with an appendix as large (1872). 4. *Russian.* *Grafitcheskaya sistema kitaiskikh ieroglifov* (St. Petersburg, 1867); Esaiya, *Rusko-kitaiski slovar* (Peking, 1867), and *Predovlenie k' rusko-kitaiskomu slovariu* (1870). 5. *English.* Morrison, *Dictionary of the Chinese Language* (6 vols., 4to, Macao, 1815–'23); 2nd part, *Alphabetic Chinese and English* (republished at Shanghai, 2 vols., 8vo, 1365); *Vocabulary of the Canton Dialect* (Macao, 1828); Medhurst, *Chinese and English Dictionary* (Batavia, 1842–'3), and *English and Chinese Dictionary* (Shanghai, 1847–'8); Lobscheid, *English and Chinese Dictionary* (4 vols., Hong Kong, 1869), and *A Chinese and English Dictionary* (1871); Doolittle, *Vocabulary and Handbook of the Chinese Language* (2 vols., 4to, Foochow and Shanghai, 1872–'3); Kwong Tsün-fuh, *English and Chinese Lexicon* (Hong Kong, 1868); Williams, *English and Chinese Vocabulary, in the Court Dialect* (Macao, 1844), and *Tonic Dictionary of the Chinese Language, in the Canton Dialect* (Canton, 1856); Chalmers, *English and Cantonese Pocket Dictionary* (Hong Kong, 1859); Stent,

Chinese and English Vocabulary, in the Pekinese Dialect (Shanghai, 1871); Medhurst, *Dictionary of the Hokkëen Dialect* (Macao, 1832); Maclay and Baldwin, *Alphabetic Dictionary of the Chinese Language, in the Foochow Dialect* (Foochow, 1870).—GRAMMARS. 1. *Latin.* Premare, *Notitia Linguæ Sinicæ* (Malacca, 1831). 2. *Portuguese.* Gonçalvez, *Arte China* (Macao, 1829). 3. *French.* Rémusat, *Elémens de la grammaire chinoise* (Paris, 1822); this has been republished, edited by De Rosny; Bazin, *Mémoire sur les principes gënéraux du chinois vulgaire* (Paris, 1845), and *Grammaire mandarine* (1856); Rochet, *Manuel pratique de la langue chinoise vulgaire* (Paris, 1846); Julien, *Syntaxe nouvelle de la langue chinoise* (Paris, 1869–'70). 4. *German.* Endlicher, *Anfangsgründe der chinesischen Grammatik* (Vienna, 1845); Schott, *Chinesische Sprachlehre* (Berlin, 1857). 5. *Russian.* Hyakinth, *Kitaiskaya grammatika* (St. Petersburg, 1838). 6. *English.* Marshman, *Clavis Sinica* (Serampore, 1814); Morrison, *A Grammar of the Chinese Language* (Serampore, 1816); Gützlaff, *Notices on Chinese Grammar* (Batavia, 1842); J. G. Bridgman, *The Notitia Linguæ Sinicæ of Premare, translated into English* (Canton, 1847); Summers, *Handbook of the Chinese Language* (Oxford, 1863), and *The Rudiments of the Chinese Language* (London, 1864); Lobscheid, *Grammar of the Chinese Language* (Hong Kong, 1864); Edkins, *A Grammar of Colloquial Chinese, as exhibited in the Shanghai Dialect* (Shanghai, 1853; 2nd ed., 1868), and *A Grammar of the Chinese Colloquial Language, commonly called the Mandarin Dialect* (1857; 2nd ed., 1864); Baldwin, *Manual of the Foochow Dialect* (Foochow, 1871).—Among the phrase-books and manuals we may notice Morrison's *Dialogues and Detached Sentences in the Chinese Language* (Macao, 1816); Shaou-tih's *English and Chinese Student's Assistant* (Malacca, 1826); Legge's *Lexilogus of the English, Malay, and Chinese Languages* (Malacca, 1841); Bridgman's *Chinese Chrestomathy in the Canton Dialect* (Macao, 1841; Williams's *Easy Lessons in Chinese* (Macao, 1842); Medhurst's *Chinese Dialogues* (Shanghai, 1844; revised ed. by his son, 1863); Edkins's *Chinese Conversations* (Shanghai, 1852); Doty's *Anglo-Chinese Manual, with Romanized Colloquial in the Amoy Dialect* (Canton, 1853); Heruisz's *Guide to Conversation in English and Chinese* (Boston, 1854); Lobscheid's *Beginner's First Book, or Vocabulary of the Canton Dialect* (Hong Kong, 1858); Wade's *Hsin-ching-lu, or Book of Experiments* (Hong Kong, 1859); Macgowan's *Collection of Phrases in the Shanghai Dialect* (Shanghai, 1862); Thoms's *The Chinese Speaker* (Ningpo.

1846); Edkins's *Progressive Lessons in the Chinese Spoken Language* (Shanghai, 1862); Martin's *The Analytical Reader* (Shanghai, 1863); Lobscheid's *Select Phrases and Reading Lessons in the Canton Dialect*, and *Tourist's Guide and Merchant's Manual* (Hong Kong, 1864); Rubery's *Easy Phrases in the Canton Dialect* (Canton, 1866); Lobscheid's *Household Companion and Student's First Assistant* (Hong Kong, 1867); Wade's *Yü-yen Tzŭ-erh Chi, a Progressive Course designed to assist the Student of Colloquial Chinese*, and *Wên-chien Tzŭ-erh Chi, a Series of Papers selected as Specimens of Documentary Chinese* (London, 1867); Macgowan's *A Manual of the Amoy Colloquial* (Hong Kong, 1869); and Wylie's *Notes on Chinese Literature* (Shanghai, 1867).

A DISCUSSION OF THE ORIGIN OF THE MANCHUS, AND THEIR WRITTEN CHARACTER.

On the Origin of the Manchus.

Beyond the north-east corner of China proper, and bordering on the sea of Japan, an immense tract of country lying between 38 and 56 degrees north latitude, and 116 and 143 degrees east longitude, is known by the name of Manchuria, or as it sometimes called Eastern Tartary.* This country has been little visited by foreigners, and our information regarding it is meagre in the extreme. It is now divided into the three provinces of Moukden, Kirin and Sagalien-ula: and is watered by the Sagalien, the Sungari, the Nunni, the Usuri and a number of smaller rivers. The country is said to be barren, thinly peopled and mountainous; the principal of the mountain chains are the Seĭh-hĭh-tĭh, the Outer and Inner Hing-an and the Kolmin-shanggiyan ranges. The latter of these, known as the Long-white Mountain, although the least in extent, has attained the greatest celebrity, as the being the place whence sprung the Tartar family now holding the supremacy in China.

According to the concurring testimony of Manchu and Chinese authors, the present dynasty are the descendants of the 女直 Neù-ch'ĭh, who ruled the northern part of the empire, under the name of the Kin dynasty, from A.D. 1115 to 1232. Relying on this authority, it is unnecessary to notice some doubts which have been insinuated by foreigners on this point,† especially as the statement receives strong corroboration by a comparison of the language peculiar to each.

* 大淸會典圖 *Tá-ts'ing-hwúy-tëèn-t'oó.* "Plates to the Statistics of the Tá-ts'ing Dynasty." Vol. 90, 91.

† Langlès' Alphabet Manchou, page 17, &c.

From ancient times, mention is made of a race of people inhabiting this country, under the name of 肅愼 Sŭh-shîn, and the more recent name of 女眞 Neù-chin is considered to be merely a modification of the same sounds.* The Sŭh-shîn are said to have brought tribute to Woo-wang, B.C. 1103, of a famous description of arrows.†

In the time of the After Han dynasty (A.D. 25 to 219), the country is spoken of under the name of 挹婁 Yih-leu, the people being described as a kind of Troglodytes, without a prince, and living in caves, the rank of the inhabitant marked by the depth of the dwelling, the most honourable having a descent of nine steps. A great occupation with them appears to have been rearing swine, whose flesh they ate, while the skins served them for clothing, and with the fat they covered their bodies in winter to a considerable thickness, in order to defend themselves against the cold; having passed the summer in a state of nudity, save a slender garment about a foot in depth round their bodies. They are described as dirty in their persons and habits; and are said to have been expert at archery, being able to aim with precision at a man's eye, while their arrows being poisoned, carried certain death with them.‡

During the Northern Wei dynasty (486 to 559), their country was known by the name of 勿吉 Wŭh-kieh, when the people are spoken of as bold and courageous, being the most energetic of all the eastern hordes; their language is said to be peculiarly distinct from all the other tribes, who are careful to keep them at a due distance. Their dwelling houses are compared to grave mounds, the entrance being at the summit, whence they descend by steps. The men are said to wear tigers' and leopards' tails attached to their heads. About the year 475 they sent an ambassador, Yih-lih-che, to China, and the custom was frequently repeated at irregular periods, until the middle of the sixth century.§

* 聖武記 *Shing-woò-ké*, "Wars of the Manchu Dynasty." Vol. 1, page 1.

† 通鑑綱目 *T'ung-këën-kang-mŭh*, "General History of China." Part 1, vol. 7.

‡ 後漢書 *Hów-hán-shoo*, "History of the After Han Dynasty." Vol. 115.

§ 魏書 *Wei-shoo*, "History of the Wei Dynasty." Vol. 100.

In the time of the Sui dynasty (581 to 617) this country went by the name of 靺鞨 Mŏ-hŏ in China, which is said to be a corruption of the name Wŭh-kieh,* the people being then divided into seven tribes, the Sŭh-mŏ, the Pĭh-tŭh, the Gan-chay-kŭh, the Fŭh-nĕĕ, the Haou-shĭh, the Hĭh-shwùy and the Pĭh-shan. They are described then as very licentious in character. About 581 they were in the habit of bringing tribute regularly to China, when the embassy was sumptuously entertained by the monarch Kaou-tsoo, whom they gratified by exhibiting their national war dance.†

In the time of the T'ang dynasty (618 to 906), the Mŏ-hŏ are noticed as being divided into several tens of tribes, some being annexed to Corea, and others in a state of vassalage to the Turks, their neighbours on the west. The Heh-shwùy Mŏ-hŏ are said to be the most northerly of the tribes, being noted for their courage, so much so as to prove a source of annoyance to the hordes in their vicinity. From the same source we learn they had a hereditary princehood, and their only implements of warfare were bows and arrows. It was their custom to bury their dead without a coffin, the horse of the deceased being killed and offered in sacrifice in front of the corpse. About 620 they sent tribute once or twice to China. Shortly after this the Chinese becoming better acquainted with these people, discovered that their national name was Neú-chin, which it is probable had been retained by them from remote antiquity, as this is said to be merely a corruption of the sound Sŭh-shĭn, and that the various appellations by which they had been designated in the interim were either the distinctive names of some of their predominating sub-divisions, or else names imposed on them by foreign authority. Their neighbours, the 契丹 Sĕĕ-tans, termed them 慮眞 Lú-chin, which is merely another variety of the pronunciation of the same name, and quite in harmony with the mutations in Chinese orthoepy. From 682 they continued the practise of sending tribute regularly till towards the close of the T'ang dynasty, the chief sometimes accompanying it in person, and sometimes sending an ambassador. The Pĭh-shan having become annexed to Corea,

* 通志 *T'ung-chĕ*, "National Annals." Vol. 194.
† 隋書 *Suy-shoo*, "History of the Suy Dynasty." Vol. 81.

on the subjugation of that country, the majority of tribe took up their residence in China. The Heh-shwùy alone maintained their integrity as a tribe, being divided into sixteen lesser tribes.*

The Pih-eih, Gan-chay-kŭh, Haou-shih and others, on occasion of the overthrow of Corea, became dispersed, dwindled away, and were no more heard of; but the scattered remnants of these people afterwards uniting with the Corean refugees, under the leadership of Tá Tso-yung, a Corean, the latter was appointed Prince of P'ei-haè, by the court of China in the year 712. Although this title was conferred at first, merely as the designation of a noble of the Chinese empire, yet he soon asserted the independence of his government, merely retaining a nominal connection with China, as a tributary state. Tso-yung was succeeded at his death by his principal son Woo-e in 718. An embassy bearing tribute from this prince, arrived at the Chinese capital in 726; and this practise they continued to follow up at short intervals, till the end of the T'ang dynasty, as also during the Leang and After T'ang; their offerings on one occasion in 777, having included eleven Japanese dancing girls. Their line of princes were appointed, subject to the approval and confirmation of the Chinese court, and the state seems to have attained such a degree of comparative civilization as to have given them an illustrious distinction among the surrounding tribes; having a regularly organized government and an established state ritual.†

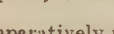
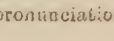
About the middle of the tenth century the Tartar tribe of Sĕĕ tans, having subdued the kingdom of P'ei-hae, gained over the territories of Liao-tung, Chihli and Shen-si, became established under the name of Liao dynasty, and incorporated with them a large number of the Neù-chins, who had formerly been subjects of P'ei-haè, and were known under the name of the Civilized Neù chins, to distinguish them from the Heh-shwùy tribe, now denominated the Wild Neù-chins, who had retreated beyond the Sagalien river.

* 舊唐書 *Kĕw T'ang shoo*, "Old History of the T'ang Dynasty." Vol. 199.

† 宋書 *Sung-shoo*, "History of the Sung Dynasty." Vol. 491.

From this time the Wild Neù-chins continued to keep up an intercourse with the Chinese court, to which they were in the constant habit of bringing tribute, chiefly of horses; while the Chinese endeavoured to employ these warlike nomades, as a check upon the more distant states, over whom they themselves could exercise little direct control. The Lĭao who had ever looked with jealousy on the conduct of the Neu-chins in this matter, and had made it their policy to sever the relation thus established with the Sung empire, at length succeeded in bringing them so far under their influence about 1023 as to receive tribute from them, which henceforward they ceased to take to China. When A-paòu-ki, the first Liaou emperor, ascended the throne, these formed one of 36 tribes nominally dependent on him; but anticipating that they might prove a source of trouble, he contrived by artifice to secure the removal of several thousand of their principal men to the country south of Liao-yâng, where he placed them in conspicuous posts, by this means dividing their strength. He was also careful to cut off all intercourse between these people and their original country, and gave them the name of Hò-soo-kwàn; they were also designated the Yellow Head Neù-chins, and were characterized as simple but courageous, and indifferent to life or death. Another tribe was located to the north-east of Corea, and acknowledged the authority of the military governor of Hĕĕn-chow. These were called the Hwûy-pá Neù-chins.

In 1032, on the accession of the Liao emperor 興宗 Hing-tsung, whose private name was 宗正 Tsung-chin, these people were induced to change their national designation from 女眞 Neù-chĭn to 女直 Neù-chĭh*; it being contrary to long established custom, that any other should presume to use the characters of the emperor's name.

* Remusat and Klaproth both spell this name *Jou-tchi*, which is probably near the ancient pronunciation. *(See pages* li, iv, *supra).* In the 正字通 *Ching-tszé-t'ung* dictionary the character 女 is said to be used for 如 in ancient compositions, and is pronounced *Jŭ*. Biot in his "Dictionnaire des villes et arrondissements dans l'empire Chinois," gives this name 如直 *Jou-tchi*. This pronunciation gains support from the Onigour orthography of the same word  *Tchortchog*; as also from the form in which it appears in several Persian works, *jurjeh* and *jurji*. *(Recherches sur les langues Tartares*, p. 15). But in the History of the Kin dynasty, in the Manchu language, a comparatively recent production, this name is spelt  *Nĭŭ-c'hi*, which we may safely take as the correct modern pronunciation.

Towards the end of the eleventh century one Yâng-kŏ, of the surname Wân-yen, a brother of the hereditary leader, gained influence among the Neù-ch'îhs as a commander, and was elected by them as their chief. Like other founders of dynasties the record of this man's ancestry is preserved up to the sixth generation. The first ancestor being named K'an-fŭh, Go-loò was his son; Yâng-haè was the son of Gó-loò: Sûy-k'wŏ was the son of Yâng-haè; Shĭh-loò was the son of Sûy-k'wŏ; Hoô-laê was the son of Shĭh-loò. Hoô-laê had three sons, the eldest of whom was named Hĭh-lè-p'o; the second, Poo-lă-shŭh, and the third, Yâng-kŏ. When Yâng-kŏ was raised to the chief station, he organized something of a regular government throughout the various tribes of Neù-ch'îhs, and collected taxes from them for the public service. The highest of his officers were all styled P'ŏ-k'eĭh-lĕĕ, and were distinguished by the names of the sun, planets and 28 constellations of the zodiac. From the chief of five, to the chief of ten thousand, each trained his dependants in the military art, while they employed their leisure time in the chase. In their military adventures the lancers were placed in the front ranks, the swordsmen were placed next, and the archers were put behind; the points of their arrows were six or seven inches long, and barbed; at less than fifty paces distance the archers did not shoot. Every five, every ten and every hundred men had their special officers. The cinquevirs beat the watch; the decurions carried ensigns; and the centurions carried drums; so that the general of a thousand men had a complete staff of flags, streamers, drums and arms. When a cinquevir was killed in battle, the five men under him were beheaded; when a decurion was killed, the cinquevirs under him were beheaded; when a centurion was killed, all the decurions under him were beheaded.

By this time the Liao dynasty, which had already been considerably more than a century in power, was now evidently on the decline; their military force was becoming weaker, and their government paralyzed by internal treachery, so that at last Hung-ke, the Sĕĕ-tan monarch, found himself unable to carry out his commands.

In 1102 the Liao general, Siaou Haè-lè, rebelled, when the Liao monarch commanded Yâng-kŏ to suppress the disorder. A-kŭh-tà undertook the service and killed Haè-lè; from which

time, he gained a much higher sense of his own strength, and of the weakness of the Sëĕ-tans. The same year Yâng-kŏ died, and was succeeded by Woò-lă-tung. In 1103 the Neù-ch'ĭhs formed a treaty with the Coreans, and the following year the Coreans invaded the country of the Neù-ch'ĭhs, by whom they were defeated. In 1113 A-kŭh-tà styled himself Chief P'ŏ-k'eĭh-lĕĕ. Before this, on an occasion when the Liao monarch came on an angling expedition to the Hwăn-t'ûn river, having invited all the Neù-ch'ĭh chiefs within a circuit of a thousand *li*, to an entertainment, he commanded them to dance in his presence. A-kŭh-tà alone refused. The monarch would have killed him, but was dissuaded by his ministers. This incident being followed by other aggressive acts of an irritating character, tended to foster a spirit of growing discontent among the Neù-ch'ĭhs towards the Liao state, which only waited a favourable opportunity to manifest itself. A-kŭh-tà now determined to resist them, openly revolted against the Liao dynasty, and took Nîng-kĕang-chow, while the Liao monarch was hunting at King-chow. In the following year A-kŭh-tà gained some decisive victories and completely routed the Liao troops, whereupon his brother Woò-k'eĭh-mae, and some of his counsellors, urged him to take the title of emperor. A-kŭh-tà's scruples having been overcome, he was proclaimed in the 1st month of 1115, and the dynasty was named the Tá-kin or Great Gold; the name of the chief river in their locality being the *Gán-ch'ŭh-hoò*, which in their language signified Gold. A-kŭh-tà was named Min; his brother Woo-k eĭh-mae was made Gán-pan P'ŏ-k'eĭh-lĕĕ; and Sa-kae and Sëay-yay were made Kwŏ-lûn P'ŏ-k'eĭh-lĕĕ. The Liao prince being now excessively enraged, raised an army of upwards of a hundred thousand men, and headed an expedition in person against the Neu-ch'ĭhs. The latter hearing of the formidable preparations which the Sëĕ-tans were making, began to lose heart, when A-kŭh-tà assembled all his officers, and looking up to heaven, addressed them thus:—"You undertook to raise troops, to assist me to subdue the ferocious Sëĕ-tans, and to establish a new dynasty but now they are about to come down upon us and exterminate us one and all. I fear there will be no possibility of withstanding them; far better were it, that I and my family should be delivered up to them, than that the whole nation should be cut up. Thus

the impending calamities may be turned into blessings." At the conclusion of this address all the chiefs bowed in concert, saying: "Since it is so, then let us all die together." This incident imparted courage to the Neù-ch'ihs, who now advanced to meet the enemy with renewed valour, and proved signally victorious, putting to flight the Sëë-tans, and capturing Hwang-lûng-foo. In 1117 the Kin took eight more chow cities, and demanded a formal recognition by the Liao court.*

In 1118 the Kin were acknowledged by the Chinese, who forthwith sought to open negotiations with them for the subjugation of the Liao. The Kin did not fail to follow up the advantage they had already acquired over the latter, who were completely overthrown by them in 1124. Not satisfied with this, however, they next made formidable inroads upon the empire of the Sung, and eventually gained over nearly all the country to the north of the Yellow River, and some extensive portions to the south of it, besides rendering the 夏 Hëá kingdom tributary to them. Having thus emerged from a state of barbarism, to one of comparative refinement, the Neù-ch'ihs were careful to improve their position, so far as to have given to their reign no mean place among the dynasties of China. In 1128 a Board of History was appointed, and the national records for the first time committed to writing. The following year the subjects of the state were forbidden to wear the Chinese costume, and were ordered to submit to the Tartar style of tonsure, under penalty of death. In 1137 the 大明 Tá-mîng system of chronology invented by 楊級 Yâng-kieh, President of the Kin Mathematical Board, was brought into use. Several other astronomers of note are mentioned among the future occupants of this office. In 1138 a regular system of government officers was established throughout the country.

The subjoined table gives the dates of the several reigns and the national designations during this dynasty:—

Emperor.	*National Designation.*	*Reign commenced.*
太祖 T'aé-tsoò	收國 Show-kwŏ	A.D. 1115
	天輔 T'ien-foó	„ 1117
太宗 T'aé-tsung	天會 T'ien-hwúy	„ 1123

* 文獻通考 *Wăn-hien-t'ung-k'aòu*, "Antiquarian Researches." Vol. 227.

Emperor.	*National Designation.*	*Reign commenced.*
熙宗 Hi-tsung.....	天眷 T'ien-keuén	A D. 1138
	皇統 Hwâng-tùng	„ 1141
帝亮 Ti-liáng	天德 T'ien-teh	„ 1149
	眞元 Chin-yuên	„ 1153
	正隆 Chíng-lung	„ 1156
世宗 Shé-tsung	大定 Tá-tíng	„ 1161
章宗 Chang-tsung ...	明昌 Mîng-ch'ang	„ 1190
	承安 Ch'ing-ngan	„ 1196
	泰和 Taé-hô	„ 1201
帝永濟 Ti-yung-tsé...	大安 Tá-ngan	„ 1209
	崇慶 Tsung-k'ing	„ 1212
	至寧 Ché-ning	„ 1213
宣宗 Seuen-tsung ...	眞祐 Chin-yéw	„ 1213
	興定 Hing-tíng	„ 1217
	元光 Yuên-kwang	„ 1222
哀宗 Gae-tsung	正大 Chíng-tá	„ 1224
	天興 T'ien-hing	„ 1232*

In the beginning of the 13th century the Kin dynasty having been established about ninety years, a new source of danger sprung up from one of the Tartar hordes, who had hitherto been tributary to them. K'ê-ŭh-wăn Tĭh-mŭh-chin, who had succeeded his father Yà-sŭh-k'ae, as chief of the Mongol tribe at an early age, was in the year 1206, elected emperor at a convocation of the neighbouring chiefs, with the designation of Genghis Khan, by which name he is better known to Europeans. The aggressive acts of this prince were soon felt in weakening the power of the Kin monarchy, and these being followed up by his son and successor Ogdai khan, the dynasty was brought to a close by the latter in the year 1234. From this time the Neù-ch'ĭh Tartars again receded to the wilds formerly inhabited by their ancestors, and one of the first acts of their successors of the Mongolian, or 元 Yuên dynasty, was the establishment of five commanderies, for the purpose of repressing any tendency to rising among them, about the northern border.†

* 金史 *Kin-shè*, "History of the Kin Dynasty," passim.
† 元史 *Yuén-shè*, "History of the Yuên Dynasty." Vols 1, 2.

A Chinese author describing their condition about this time, says:—"The country above the Nunni river, from the sea to the Sagalien, is inhabited by Wild Neù-ch'ihs, who are occupied chiefly with agriculture. When they meet on ceremonial occasions, each man carries a fish bladder full of spirits, and all take their seats on the ground, sing and drink; when any slight contention occurs, they fall to fighting with their bows and arrows. From 可木 K'ò-mŭh westward the inhabitants construct dwellings with the bark of the 樺 *Hwa* tree; while travelling they carry these on their backs and spread them out on frames when they stop. They make their living by rearing horses and hunting. Those living between the 阿迷 O-mê and 散巒 Sán-loò rivers, bear a great resemblance to the K'o-mŭh tribe; they use boats constructed with five planks, by means of which they navigate the waters with great rapidity. Four tribes living in the 乞列迷 K'eĭh-lĕĕ mê region, are effeminate, avaricious and deceitful; they live upon the fish they catch; in summer they are clothed with the skin of fish, and in winter they wear dog skin; they neither sow the different kinds of grain, nor rear cattle. They use dogs for cultivating the land, and also eat them at their entertainments. There is one tribe of Wild Neù-ch'ihs living in K'eĭh-lĕĕ-mê, more than three thousand *li* distant from 奴兒干 Noò-ûrh-kan, who are hardy and covetous; they figure their faces and fasten up their hair in a knot; on their caps they wear red cord tassels, and have green dresses with various coloured sashes; having trowsers, but no gowns. The women have pearls and ornaments suspended from their caps, and small copper bells attached to their dresses. These people live on the animals they shoot on the hills. In summer they dwell in the open fields; in winter they settle in houses. There is one tribe called wild men of the northern mountains, who ride about upon deer. Another tribe have their dwellings scooped out of the level ground, an aperture being left at the top, through which they ascend and descend by steps; they spread out grass to lie upon like dogs. The 窩苦兀 Wo-k'oò-wŭh are on the east of Noô-ûrh-kan; the men are very hairy, and wear bear-skin caps and figured cloth dresses. When their parents die they take out their intestines and stomach, dry them in the sun, and carry them on their backs, invariably making

an offering to these, when they eat and drink; after three years they cast them away. A neighbouring tribe is denominated 吉里迷 Kieh-li-mê, in which the number of the women greatly predominates. When a female is born among them, dogs are brought as presents; when she is ten years of age, she is given in marriage, which occasion is celebrated by an entertainment of raw meat.*

The Yuên dynasty having giving place to the Ming in 1368, it was an object of solicitude with the latter to conciliate this somewhat intractable population. Overtures were proposed to them on the succession of Hung-woò, and partly by intimidation, partly by offers of rewards, several of the chiefs were induced to tender their submission to the new dynasty. Such were forthwith installed in office, nominally under the imperial government, being made military chiefs and leaders of their respective tribes, and while each tribe was allowed to follow its own peculiar customs, it was stipulated that they should render a triennial tribute, as an acknowledgment of their loyalty. It was thought, by employing their chief men in the defence of the various passes, that they might thus be diverted from their predatory habits; and still further to promote this object, a market was opened at K'ae-yuên,† where they were enabled to dispose of their horses, in exchange for salt, rice and cloth. While some were thus disposed to submit to the domination of the Mîng rulers, the greater part were by no means willing to place themselves under the restraints which the latter sought to impose. Frequent were the collisions in consequence, and these in many instances proved far from being satisfactory to the Mîng. One of the most formidable revolts was headed by Yay-sëen in 1444, on which occasion he caused the imperial diplomas, and all evidence of connexion with the Chinese empire, held by the chiefs, to be destroyed. From this time the slight link by which these Tartars had been attached to the central empire, became much weakened, and while the supremacy of the Mîng was virtually ignored, mutual contentions between the various hordes were matters of unceasing occurrence ‡

* 續文獻通考 *Sŭh-wăn-hien-t'ung-k'aòu*, "Supplement to the Antiquarian Researches." Vol. 236, page 24, &c.

† 24.35 North Latitude, 123.40 East Longitude.

‡ 皇明四夷考 *Hwâng-mîng-szé-ê-kaòu*, "Researches respecting Foreign Nations, during the Mîng Dynasty." Vol. 1, page 23, &c.

Such was the state of matters about 1580, when a man above the ordinary stamp, appeared on the arena of conflicting interests, in the person of Noò-ûrh-ha-chîh, afterwards known as T'ae-tsoò. At first merely chief of a single tribe; by his military prowess, his steady perseverance and undaunted courage, he succeeded in uniting the scattered tribes of Tartars throughout a vast territory on the north and south of the Sagalien river, and freeing his adherents from the foreign yoke. Born at Hïh-t'oò-a-lă, the present Hing-king* in 1559, without a remote genealogy, the obscurity of the family is shadowed forth in the current tradition, which ascribes their origin to an angelic female on the Kolmin-shanggiyan or Long-white hill, about the time of the Liao or the Kin dynasty. According to this account their first ancestor was named Aisin Gioro, whose descendants, after a few generations, fell into distress, and after a few more, Chaóu-tsoò was born, about 1450. Hing-tsoo was the great grandson of Chaóû-tsoò; the fourth son of Hing-tsoò was King-tsoò; the fourth son of King-tsoo was Hëèn-tsoò; and T'aé-tsoò was the eldest son of Hëèn-tsoo. In 1583 T'aé-tsoò having already done much towards consolidating the strength of his nation, which was now named the Manchu, after the name of the tribe to which he originally belonged, was threatened by the secret machinations of one of his own family, named Nê-k'an-waé-lân. With the connivance of the latter, the Mîng soldiers attacked the Manchu city of Koò-lïh, the governor of which, A-t'aé, being married to the granddaughter of King-tsoò, while the city held out against the siege, King-tsoò and his son Hëèn-tsoò both repaired to the fortress to rescue their female relative, but A-t'aé refused to let her go. The besiegers finding themselves unable to make any impression on the city, decoyed the people out under the false pretence that those who submitted would be pardoned, when the whole of the inhabitants were massacred, including King-tsoò and Hëen-tsoò. T'aé-tsoò met with a formidable opposition to his progress in the Yĕ-hïh tribe, who were aided by the Mîng. In 1593 these, together with the Hă-tă, Woò-lă and Hwuy-fă tribes, the K'o-ûrh-sin and Kwa-ûrh-ch'ă Mongolians, and some hordes under vassallage to the Manchu and Kolmin-shanggiyan tribes, joining three companies of the Mîng troops, made a

* About 42 North Latitude, 124 East Longitude.

combined attack on T'ae-tsoò, who withstood the allied forces at Koò-lĭh hill, and eventually put them to the rout, killing Poó-ch'aè-chĭh, prince of Yĕ-hĭh, capturing Poó-chen-t'aé, prince of Woò-lă, beheading four thousand men and taking three thousand horses and a thousand coats of mail. After this there was a general recognition of T'aé-tsoò by all the tribes; and as his power extended his ambition increased. Having at first raised troops for the defence of his own territory, by degrees as he acquired dominion over adjacent tribes, he induced the officers of the Mîng dynasty to ratify a treaty with him, in which mutual rights were claimed and stipulated. The bad faith of the Chinese officers, however, both with respect to this and other matters, gradually kindled a flame of vengeance in the breast of T'aè-tsoò, which at last broke its boundary in a determination to invade the imperial domain.

In 1618 in the third month, when about to advance on an expedition against the Mîng power, he caused a catalogue of seven grievances to be drawn up, which he read publicly in an appeal to Heaven, as follows:—"While my grandfather and father had never injured a straw or an inch of ground on the Mîng territory, the Mîng wantonly raised a disturbance on the frontier, and put to death my grandfather and father, which is the first object of resentment. Although the Mîng raised a quarrel with me, yet being desirous of living on amicable terms, I entered into a treaty with them, which was engraved on a stone tablet, to the effect that 'Manchus and Chinese should be mutually prohibited crossing the border, and those who crossed should be put to death.' Now some having been, under such circumstances, treated with leniency, the Mîng misconstruing this leniency, and ignoring the terms of the treaty, crossed the border to assist (our enemies) the Yĕ-hĭh tribe, which is the second object of resentment. The Mîng people being in the habit of crossing the border every year, between the Tsing and Ya-lŭh rivers, for the purpose of plundering, in accordance with the treaty, some of these have been visited with capital punishment; but the Mîng turning their back on the treaty, charged us with putting these to death on our own authority, seized K'ang-koo-le and Fang-keĭh-núy, our envoys to Kwàng-mîng, with ten attendants, whom they put to death at the border:

which is the third object of resentment. When the Mîng crossed the border, to assist the Yĕ-hĭh with their troops, they caused the maiden who was betrothed to me, to be sent to the Mongols: which is the fourth object of resentment. The three departments of Ch'ae-hô, Shan-ch'a and Foò-ngan, have been for generations cultivated by the people guarding our border, but the Mîng troops have driven them away without allowing them to reap the fruit of their labours, which is the fifth object of resentment. The extra-frontier tribe Yĕ-hĭh having sinned against heaven, the Mîng put confidence in their statements, and sent an envoy with a despatch, reviling and insulting us, which is the sixth object of resentment. Formerly on two occasions the Hă-tă assisted the Yĕ-hĭh in invading our territory, when we returned the aggression; Heaven having delivered the Hă-tă people into our hands, the Mîng taking part with them, constrained us to send them back to their own country; after which the Hă-tă people were visited with several incursions by the Yĕ-hĭh. Now in the subjugation of kingdoms, those who comply with the mind of Heaven, are victorious, and preserve their standing; while those who oppose the Celestial dictates, are defeated and perish. How can those who have died in battle be restored to life? Shall those who have been taken prisoners be sent back again? Heaven establishes princes of great kingdoms, that they may attain universal rule; why should our kingdom be marked out as an object of hatred? At first, the several states of Hoó-lûn united their troops to invade us; therefore the Hoó-lûn were suppressed by Heaven, which has looked with favour on us. Now the Mîng assisting the Yĕ-hĭh, who are cast off by Heaven, has opposed the Celestial dictates, reversed the order of right and wrong, and acted false in their decisions, which is the seventh object of resentment. On account of these seven grievances I am now going to subjugate the Mîng." On the publication of this manifesto T'aé-tsoò forthwith proceeded to take vengeance on the Mîng, with a force of twenty thousand, horse and foot, and the success that attended his arms in every direction, was such as to inspire confidence in his host of followers. Inured to war from his youth, this prince knew how to direct his attacks with most powerful effect, and during the eight years following the declaration of this famous manifesto, the

Mîng found their strength sorely reduced towards the Manchu frontier. In 1626 T'aé-tsoò died, and was succeeded by T'aé-tsung, at the age of thirty-five, who followed up the conquests of his father in a similar spirit. He was formally proclaimed emperor in 1636, his dynasty being designated the Tá-ts'ing. At his death in 1643, he was succeeded by his ninth son, Shún-che, who is looked upon as the first Manchu emperor of China.* The following is a tabular list of the monarchs of the present dynasty :—

Ancestral Designation.		*Name of Reign.*		*Reign com.*
世祖章皇帝	Shé-tsoò-chang Hwâng-ti	順治	Shún-che	A.D. 1644
聖祖仁皇帝	Shíng-tsoò-jîn „	康熙	K'ang hi	„ 1662
世宗憲皇帝	She-tsung-hien „	雍正	Yung-chíng	„ 1723
高宗純皇帝	Kaou-tsung-sun „	乾隆	Kien-lung	„ 1736
仁宗睿皇帝	Jîn-tsung-juy „	嘉慶	Kia-k'ing	„ 1796
宣宗成皇帝	Seuen-tsung-ching „	道光	Taòu-kwang	„ 1821
		咸豐	Hien-fung	„ 1850

On the Origin of the Manchu Character.

There are few instances in which we find greater facilities for investigating the history of a written character than in the case of the Manchu. While we have notices of the condition of this people, back to a very early date, their literary history is but of recent origin. The rude aspect of the nation, and the want of all traces of written records of any kind among them, might furnish sufficiently satisfactory evidence on the point, but history explicitly informs us that during the 9th century they were still without a written character.†

Nor is the statement materially affected by the fact that a large section of them who were incorporated in the kingdom of P'ei-haè, may have become initiated to some extent into the Chinese literature, during the period in which that state flourished; for no works have been handed down to us as the result, and it is probable that what they then gained, was speedily lost on the dissolution of that power. Whether these possessed a character peculiar to themselves, we are not informed, but we may imagine the art was not cultivated to a great extent among them, since it is recorded that in 833 the magnate Kaou Paòu-ying arrived with three youths from P'ei-hae, at the Chinese court, requesting that they might be allowed to remain some time to receive instruction and return.

* 東華錄 *Tung-hwa-lŭh*, "State Records." Vols. 1, 2, 3, passim.
† *K'ew-t'ang-shoo*. Vol. 199.

If the subjects of the P'ei-haè were accustomed to writing, still the great body of Tungous Tartars knew nothing farther than the use of wooden tallies, with certain rude conventional marks, which served as bonds in case of contracts. Accordingly it is recorded of the Sëĕ-tan tribe that A-paòu-ke, the first emperor of the Liao dynasty, employed a great number of Chinese, and they instructed him, by an adaptation of the Official Chinese hand, with certain additions and contractions, to construct several thousand characters, by which the engraved contract tallies were replaced.* These, which were called Uncial Characters, were commenced in the 1st month of the year 920, and were finished and ordered to be generally used in the 9th month. In 924 a stone tablet to the memory of Lung-p'ieh-gŏ khan was engraved in Sëĕ-tan, Turkish and Chinese characters.†

Although the Sëĕ-tans thus early took the lead, the example was not followed by their neighbours at least for many years; for up to the 12th century we still find the Neù-ch'ih chiefs issuing their orders by the old device of an arrow with a notch in it, while matters of urgency were distinguished by three notches.‡ On their establishment, however, as the Kin dynasty, having captured a number of Sëĕ-tans and Chinese, they for the first time gained a knowledge of the written character used by these two nations. A-kŭh-tà, their first emperor, saw the importance of turning his attention to this matter, and in 1119 gave orders to Kŭh Shin, to invent characters on the same principle as those of the Sëĕ-tans, but suitable for expressing the sounds of the Neù-ch'ih language and bearing a resemblance to the Chinese Pattern hand. This order was complied with, and the characters put into circulation, they being termed Uncials. A set of letters were afterwards invented by the Emperor Hi-tsung, which were called Small Characters, and were first brought into use in 1145. The Classics and Histories of China were published in the Neù-ch'ih character.§ The use of these alphabets seem to have outlived the dynasty, for a college was established for the special study of the Neù-ch'ih in 1407, during the Mîng dynasty.‖ Eighteen

* *Wăn-hien-t'ung-k'aŏu.* Vol. 345.
† *Sŭh-wăn-hien-t'ung-k'aŏu.* Vol. 184, page 31.
‡ *Wăn-hien-t'ung-k'aŏu.* Vol. 327.
§ *Sŭh-wăn-hien-t'ung-k'aŏu.* Vol. 184, page 31.
‖ Remusat's Mélanges Asiatiques. Vol. 2, page 248.

different works in the Neù-ch'ïh character, are still preserved in the Imperial Cabinet Library at Peking.* Specimens of it are also to be found on several stone tablets in different parts of the empire.

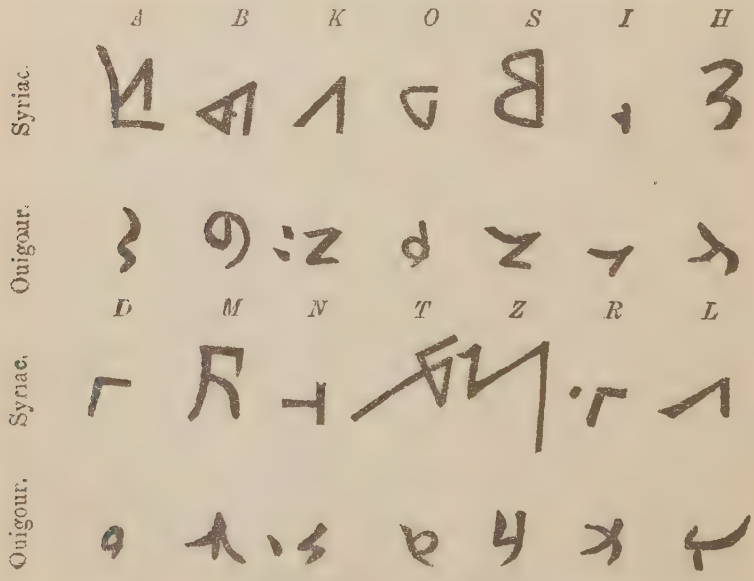
But although the ancient Neù-ch'ïh character may have answered the purposes of the state for the time being, the literary spirit of the nation was not sufficient to preserve it in use through many generations, for on the conquest of the Ming by the Manchus, the latter were without any national character or literature. In tracing the history of that now in use, the way is clear as far as the Ouigour. Beyond this we cannot speak with certainty as to its derivation. At what time the Ouigour character was first known in China, is still a question for investigation, the resolution of which might materially assist in determining the source whence derived. Mà Twang-lin informs us that besides the Chinese characters, the Ouigour nation had the 胡字 *Hoô-tsze*, "Foreign Characters."† Although this word *Hoó* was used generically for all foreigners of Central and Western Asia, yet when applied to the written character there is reason to believe that it is restricted in its sense to a particular alphabet; for Wei Tseïh, a Chinese author in the 9th century, enumerating 56 different kinds of writing that have been used in China, mentions as the 54th, the 外國胡書 *Waé-kwŏ-hoô-shoo*, "Hoô writing of foreign nations," which he says was introduced by the prince 阿馬鬼魅 *A-mà-kwei-me*, and resembled in form the *Siaou-chuen*, or Lesser Seal Character.‡ Besides this he makes special mention of the Sanscrit alphabet, thus shewing that the Hoô did not include every kind of foreign writing. The question as to the derivation of the Ouigour character has been discussed at some length both by Remusat and Klaproth. The former considers it as unquestionably the off-spring of the Estrangelo form of the Syriac, a source which satisfies the conditions with much propriety, when we consider the great intercourse that was maintained with the Tartar nations by the Nestorians who used this character during the middle ages. And if this which is the generally received opinion be correct, the genealogy is further to be traced by two intermediate stages up to the Early Phœnician, with little room for

* 文淵閣書目 *Wăn-yuên-kŏ-shoo-mŭh*, "Catalogue of the Imperial Cabinet Library." Vol. 18.

† *Wăn-hien-t'ung-k'aou*. Vol.

‡ *Sŭh-wăn-hien-t'ung-k'aŏu*. Vol. 184, page 25.

doubt.* A glance at the latter, the Aramæan character as preserved on Egyptian monuments, the Palmyrene, and lastly the Estrangelo Syriac, will be sufficient to show the great probability of such a parentage for the Ouigour. A question arises, however, as to the direction of the writing; the Syriac used in the west being invariably written in horizontal lines, while the Tartar character in the east, is written in perpendicular lines. Remusat himself supplies the most natural solution of this difficulty. The fact of its being required frequently interlinear with the Chinese, suggests the idea of its conformity to that literature, while the lines succeeding each other from left to right, preserves the form common to most of the Semitic languages, as may be seen by turning a page of Tartar with its right side downwards. The suggestion is still further borne out by the fact that the only known specimen of Syriac in China, which is on the Nestorian monument at Si-ngan Fu, is written in perpendicular lines in accommodation to the Chinese, while the Ouigour manuscripts that have been discovered in the west, are written in horizontal lines. A specimen of the Syriac letters from the Si-ngan Fu tablet will be the fairest criterion with which to compare the Ouigour letters :—



* Kitto's Cyclopædia of Biblical Literature. Vol. 1, page 122.

The above exemplar of the Ouigour letters, is taken from a facsimile of part of a manuscript, Ouigour-Chinese Vocabulary, given in the 龍威秘書 *Lung-wei-pih-shoo*,* the characters being in an easy running style; while the Nestorian characters on the contrary, are from a carefully executed piece of art. Both are given the full size of the originals. Other examples might no doubt be found, in which the resemblance is much more striking.

M. Klaproth, while he equally holds to the Nestorian origin of the Ouigour character, asserts that it is directly derived from the Sabean, or character used by the Christians of St. John, stating that this alphabet was also used by the Nestorian missionaries, but he does not cite his authority for this fact.†

Some authors, however, have undertaken to deny this origin, asserting that the resemblance is more apparent than real, while that between the Ouigour and Zend is more real than apparent.‡

When Genghis khan began his conquests, on subjugating the Naimans, 塔塔圖該 T'ă-t'ă-t'oô-kaè,§ a Ouigour by nation, the preceptor to Tá-yáng, khan of the Naimans, was taken prisoner. Having been entrusted with the national seal, he was endeavouring to make his escape with it when caught. On being asked by Genghis "why he carried that seal, seeing the people and territory of Tá-yáng had now reverted to the Mongolians," T'ă-t'ă-t'oô-kaè replied, "It is entrusted to my care, and I will preserve it to death; unless I find my former prince and deliver it to him, how dare I entertain any other motive?" Genghis, struck with his fidelity, again asked, "What is the use of this seal?" to which he replied, "It is used as a witness in the receipt and outlay of the national property." Genghis being much pleased with his bearing, appointed him to a confidential office, allowing him still to retain the seal, which was henceforward employed to stamp all imperial edicts. Being asked by the emperor if he was thoroughly conversant with his own national literature, T'ă-t'ă-toô-kaè showed the whole extent

* Part 9, Division 3, Vol. 4.

† Mémoires relatifs à l'Asie. Vol. 2, page 328.

‡ See an article by Schmidt in the "Mines de l'Orient." Vol. 6, p. 325, and Davids' "Grammaire Turke." Discours preliminaire, p. 15.

§ This name is spelt 塔塔統阿 T'ă-t'ă-tung-a in the original History of the Yuen, which orthography is followed by Klaproth. The names in this article are according to the revised edition, published in the time of Kien-lung.

of his acquirements, whereupon he was commissioned to instruct the heir apparent and the princes in the use of the Ouigour character and its application to the promulgation of national announcements.*

The Mongolians previous to this, not having any written language of their own, now adopted the Ouigour character and language in all their state documents, and this custom was continued through the reigns of Ogdaï, Guiyu and Mengkih khans.†

M. Klaproth, who has collected a number of facts on this subject from authors in various languages, European and Asiatic, gives the following quotation in reference to this alphabet from Ibn Arabschah, an Arabian author: "The Djagatai have a written character named the Ouigour, which is known as the writing of the Mongols: is consists of fourteen consonants, according to the following division:—

Mongol.	Arabic.		Mongol.	Arabic.
A			D	
B			M	
K			N	
W			T	
S			Z	
I			R	
G			L	

* *Yuên-shè.* Vol. 121, page 6.

† "Abhandlung über die sprache und schrift der Uiguren," page 58.

What restricts their consonants to this number is that the gutturals are all written and pronounced alike. This applies also to letters of the same organ, such as ﻫ *hé* and ﺯ *fé*; ﮊ *zé*, ﺱ *sin* and ﺹ *sad*; ﻁ *té*, ﺩ *dal* and ﻫ *thà*. With this character they write their diplomas, edicts, commands, books, regulations, laws, annals, poetry, history, public and judicial transactions, tariffs, and in general all that relates to the government and legislature of Genghis khan. Whoever is clever at this writing will never suffer want among them, for it is the key to wealth.*

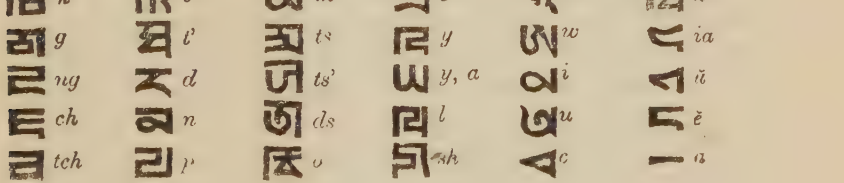
In the reign of Kubla khan, Donda, the brother of that emperor, headed a mission to Tibet, to bring Saadja Bandida to the Mongolian court, where he occupied the office of High-priest of Lamaism for seven years, during part of which time he occupied himself in adapting the Ouigour character to the Mongolian language, but he died before his system was complete, having still retained the 14 Ouigour consonants as before.†

He was succeeded by Bachspa, another Tibetan, in 1260, who was deputed to carry on the work, but the latter casting aside what had been done by his predecessor, invented an alphabet of an entirely different character, grounded on the Tibetan form. This was finished and put in circulation by imperial command in 1269.‡

* Mémoires relatifs à l'Asie. Vol. 2, page 318.

† "Abhandlung, &c.," pages 58, 59.

‡ *Yuén-shè*. Vol. 202, p. 1. There are a great many specimens of this writing still preserved through the country, on stone tablets, coins, seals, &c. A very good example of an imperial edict may be seen in the Confucian temple in Shanghai; there is another copy of the same in the Confucian temple of Sung-kiang Fu. The following are the alphabetic elements procured from an analysis of the Shanghai inscription :—



While great efforts were made by the emperors to bring the Tibetan-Mongol alphabet of Bachspa into general use, very few seem to have adopted it by preference, hence the complaints repeatedly made of the obstinate attachment of the officers to the Ouigour writing. Timor khan, the grandson and successor of Koubla, having set Tsordji Osir to translate the Tibetan religious books into Mongolian, in the new Tibetan-Mongol writing, the latter is said to have been stopped by the difficulty of the process; whereupon recurring to what his relative Saadja Bandida had done, he added such letters as were necessary for the execution of his task. At a later period, during the reign of Ha-shang khan, he made still farther amendments. His various additions consisted of the vowels *a*, *o*, *ô* and *i*; the consonants *sh*, *s'*, *ds* and *pu*; and the finals *n*, *p*, *k*, *m*, *l*, *r*, *i*, *i*, *u* and *ng*. He retained the Tibetan numeral figures unchanged, these being originally of Hindoo origin.*

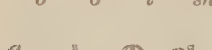
With these several improvements, the number of the letters of the alphabet amounted to thirty-two, being very near the form in which it was afterwards continued :—

ORIGINAL.

a b k w s i g d m n t ts r l

ADDITIONAL.

a o ŏ i sh s' ds pu n p k m l r



t i u ng.

A number of letters were added on later occasions for the purpose of representing the sounds of Sanscrit and Tibetan words when transferred. These were termed *Galik* letters, but as they have never come into common use for the pure Mongolian language, they can scarcely be considered an integral part of their alphabet.†

* "Abhandlung, &c.," page 60.

† For the form of these letters, see Schmidt's "Grammatik der Mongolischen sprache," page 5.

Although for the sake of simplicity the Mongolian elements are here considered as alphabetic symbols, yet it should be remembered they are never so treated by the natives, the ultimate form of subdivision with them being the syllable, composed of a consonant and vowel, or two consonants with a vowel between. In this manner the number of their written characters amounts to 127; these being compounds of the 30 elements given above; and are all arranged under twelve classes, according to their terminations.

In the above form, with the exception of some unimportant modifications, this character was used by the Mongols throughout the Yuên dynasty, and by means of their widespread influence it became the character of official correspondence among other Tartar nations; the rigid formality of the original type having given way to a free running hand, in which the diacritic points were omitted, and the letters thrown together in such a hasty manner as to require minute inspection by one unpractised in the art, before he can trace the analogy. During the Ming dynasty this was termed the 韃靼 *Tă-tă;* and in 1407 a certain number of students were appointed by imperial authority to be instructed in the knowledge of this writing and language. The Mongolian tribes being still sufficiently formidable to render it an object with the Chinese to hold easy communication with them, so the Manchus also in their diplomatic intercourse with the Mongols, found it expedient to gain a certain proficiency in the literature of the latter, long before they became masters of China; and we are told that they trained a number of youth to the study of this and other foreign languages.*

In 1599 T'aé-tsoò, the first Manchu emperor, gave orders to 額爾德尼 Gĭh-ùrh-teh-ni, a scholar belonging to the yellow banner, well skilled in the Mongolian literature, to assist the high minister 噶蓋 Kŏ-kaé to invent a system of writing for the Manchus. Kŏ-kaé memorialized the emperor to the effect that "as the Mongolian character had long been in use, the remodelling would be attended with great difficulty." The emperor replied, "If our native language must be translated into the

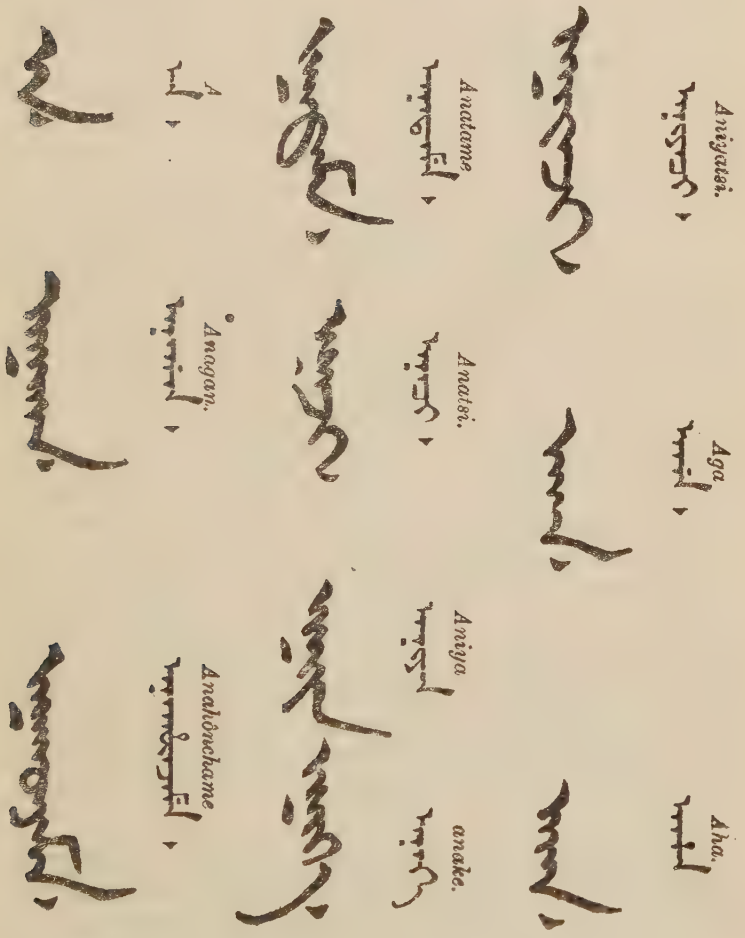
* Recherches sur les langues Tartares. Page 219.

language of the Mongols, before it can be read, then it must remain inaccessible to those who have not studied the Mongolian. Why should it be more difficult to form characters to express our national language than to study the language of another nation?" Gĭh-ùrh-teh-ni then memorialized, saying, "Your servants are ignorant of the art of modelling new characters; hence the difficulty." The emperor again met this by remarking, "There is no difficulty; merely apply the Mongolian characters to the sounds of our language, and connect the syllables together to form words; thus the written character will show the meaning."* Soon after this Kŏ-kaé suffered capital punishment for a state offence, and the work of forming the characters was entrusted to Gĭh-ùrh-teh-ni alone, which, having accomplished, the emperor caused the alphabet he had constructed to be put into circulation, from which time the native character dates its origin. After the death of Gĭh-ùrh-teh-ni the superintendence of this work was committed to 達海 Tă-haè, a literary officer under the Blue Banner, who, together with 庫爾禪 K'oó-ùrh-shen and others, removed difficulties and made additions, arranging the whole under twelve classes.† The following shows the stage to which

* The force of this last remark does not at first sight strike one who is accustomed to read his mother tongue; but its propriety may be made apparent by considering the condition of the Chinese at present, with whom a tolerably extensive knowledge of the written character is often attained, without the ability to understand a single line; and so with the Manchus at the time spoken of, although many might be able to read the Mongolian character, yet comparatively few understood the written language. Klaproth in a severe critique on the labours of Langés, published in 1815, under the name of Baron Leon-tiew, gives the following as the reply of the emperor:—"Ecrivez la lettre *a*; attachez-yun *ma*, at vous aurez *ama*, père; écrivez la lettre *e*; ajoutez-y *me* , vous aurez *eme* , mère.—J'ai tout bien considéré; ainsi écrivez, et appliquez cette règle aux autres mots." This generally accurate writer does not state his authority for these remarks: they are not given in the Chinese work quoted here. The form of *ama* as he gives it, does not exist in the language; it should be .

† 滿州名臣傳 *Man-chow-ming-chin-chuen*. "Biography of Renowned Manchu Statesmen." Vol. 8, pages 28, &c.

this writing had arrived during the reign of T'aé-tsoò, being taken from a fac-simile engraving in Langés' Alphabet Mantchou, page 59. The transcription is given in modern characters by the side, and will afford an easy means of comparison.



The coins of that period (in Chinese 天命 T'ien-ming), which are occasionally to be met with, also contain a superscription in the same character.

Tă-hae is said to have shown great ability in his youth, having attained a knowledge of Chinese and Manchu literature when only nine years of age. On reaching manhood he was appointed by the emperor Officer of the Board of Letters; all state communications with the Chinese, Mongols and Coreans being composed by him. In 1632 Tă-haè undertook a thorough revision of the original syllabary as composed by Gĭh-urh-teh-ni. The emperor addressing Tă-haè, said, "Hitherto our twelve classes of characters have not been marked with rings or points, and the natural divisions have been run together without distinction. Now a youth who has studied this writing, when he merely meets with ordinary words in it, understands them without difficulty; but when proper names occur he is sure to fall into error. Do you now invent a system of rings and points, in order to mark the distinctions, that so the characters may clearly express the sense and sound, and the study may be attended with greater advantage." Tă-haè thereupon applied himself to follow out the emperor's views, and arranged the points and guttural marks now in use. Besides this, finding the characters of the twelve classes insufficient to express all the sounds of the Chinese, he added a number extra. Still even with these additional it was found that some sounds could not be accurately represented; whereupon he resorted to the expedient of running two syllables into one, after the manner of the Chinese (反 切 *fàn-ts'ĕĕ*) syllabic spelling, and this was found to be more efficient for the Manchu than the Chinese. The Manchu writing as thus augmented consisted of upwards of 1,300 syllables, and from that time to the present there has been no change of importance in the form of the characters. In 1669 the Emperor Kang-hi caused a stone tablet to be erected to the memory of Tă-haè, on which a record of his labours is set forth.*

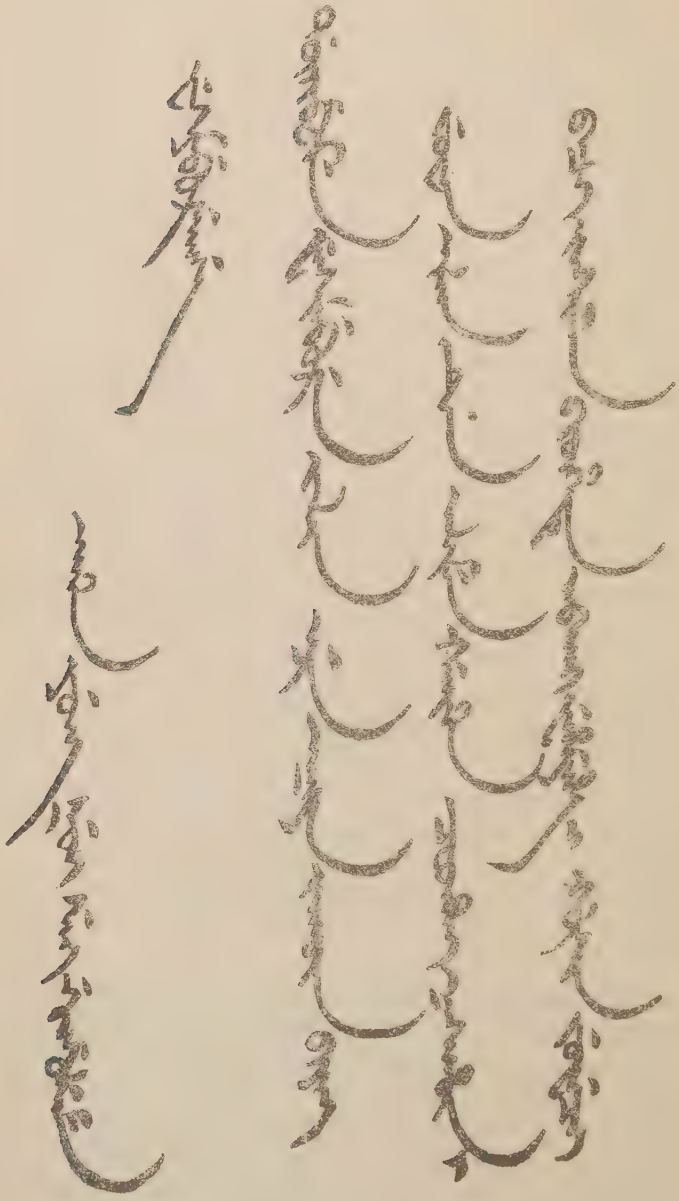
The following are the alphabetic elements of the Manchu as now in use, giving the initial, medial and final forms for each letter; but it should be observed as before that the natives do not carry the analysis of their writing to this extent, the system as taught by them being essentially syllabic:—

Mwan-chow-ming-chin-shuen. Vol. 3, page 21, &c.

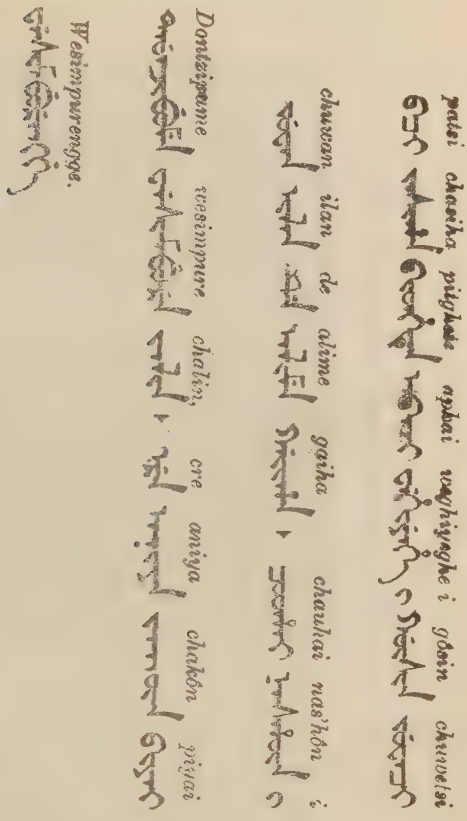
	Initials.	Medials.	Finals.
A			
E			
I			
O			
U			
O			
N			
K			
G			
H			
P			
P'			
S			
Sh			
T, D			
T, D			
L			
M			
Tch, Ts			

	Initials.	Medials.
Ch, Tz		
Y		
K		
G		
Gh		
K'		
G'		
Kh		
R		
F		
W		
Ts'		
Tz'		
Tsz		
J		
Sz		
Tsh'		
Tzh'		

Although there is a uniformity in most books printed in the Manchu character, yet the natives do not scrupulously adhere to this style on all occasions, for we find that as in Chinese, the Manchu also is capable of modifications in the detail, according to the use to which it is applied. The following page shows a specimen of the free manuscript style, corresponding to the 行書 *hing-shoo* in Chinese; being the commencement of the draft of a memorial from some officers of the Bannermen to the emperor.



TRANSCRIPT OF THE PRECEDING.



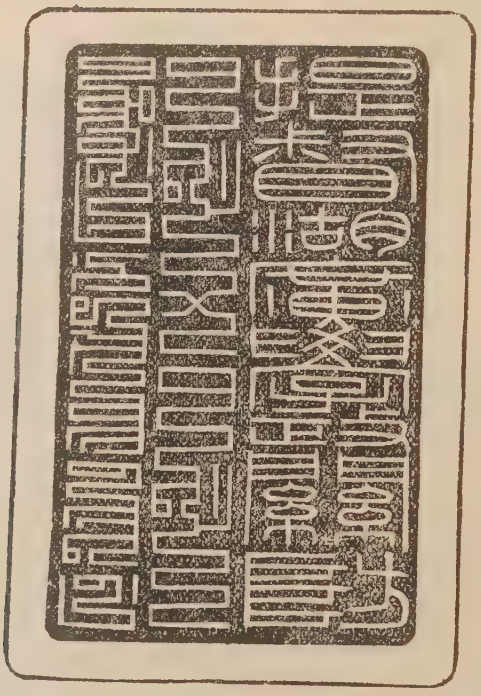
TRANSLATION.

"*Respectful Memorial of the Slave Yung Shwi and others.*"

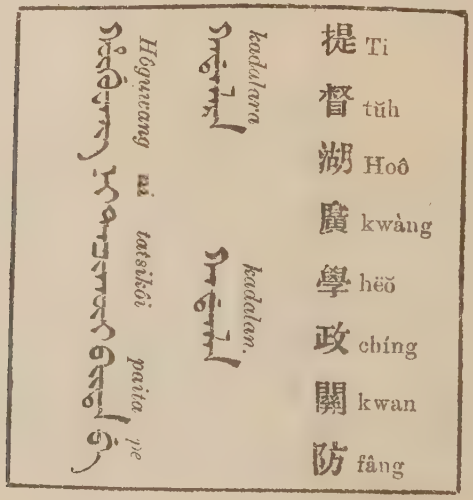
"WHEREAS this memorial is presented for inspection:—because on the 13th day of the 8th month of the present year, a despatch was received from the Cabinet council (containing the Imperial Will as transmitted on the 28th day of the intercalary 7th month), of the 32nd (year) of Kien-lung.—"

In 1748 the Emperor Kien-lung published a poem in praise of Moukden, the capital of Manchuria. This was printed in 32 different kinds of Chinese character; and a corresponding number of exemplars gave as many different styles of the Manchu character. A considerable number of varieties of the Manchu character may be observed on the official seals. The following are three varieties selected from many others:—

SIGNET OF THE CHIEF DIRECTOR OF EDUCATION FOR HOO-KWANG.



TRANSCRIPT OF THE ABOVE IN THE COMMON CHARACTER.



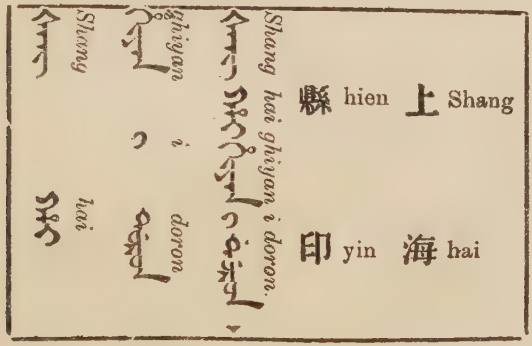
SIGNET OF THE INTENDANT OF CIRCUIT FOR SOOCHOW, SUNG-KIANG AND T'AI TSANG.

TRANSCRIPT OF THE PRECEDING IN THE COMMON CHARACTER.

Gaptzi elghiyengge i iletsi aniya chorgon mujn
daulì hafan i kadalan.
Giyangnan i Su Sung Tai i
太 T'aé 江 Kiang
海 haè 南 nân
關 kwan 蘇 Soo
防 fâng 松 Súng

SEAL OF THE MAYOR OF SHANGHAI.

TRANSCRIPT OF THE PRECEDING IN THE COMMON CHARACTER.



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1815-1887.
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